DOCUMENT RESUME

ED 405 932 JC 970 251

TITLE	Strategic Plan for Information Technology, 1997-2002: Communication, Cooperation, and Collaboration.
INSTITUTION	Los Angeles City Coll., Calif.
PUB DATE	97
NOTE	111p.; Presented by the InfoTech Committee.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	College Administration; *College Planning; Community Colleges; Computer Networks; *Computer Uses in Education; Educational Technology; Electronic Mail; *Information Technology; Mission Statements; *Organizational Objectives; Resource Allocation; Staff Development; *Strategic Planning; *Telecommunications; Two Year Colleges
IDENTIFIERS	Los Angeles City College CA

ABSTRACT

This document presents the strategic plan for information technology at California's Los Angeles City College (LACC) for 1997 through 2002. Following introductory materials, chapter 1 provides background on planning at LACC and describes the Information Technology Core Committee. Chapter 2 describes the college's philosophy and vision related to information technology in education and presents four main goals and seven principles guiding the plan. Chapter 3 focuses on physical resources, providing overviews of LACC and the LACC District computing systems; information on contracts and licenses, security, and services provided; and a description of the college's telecommunications infrastructure. Chapter 4 discusses organizational support for administrative and academic computing and describes recommended changes and staff additions for phase 1 of the plan, from 1997-2000, and phase 2, from 2001-2003. Chapter 5 describes staff development initiatives, including LACC's teaching-learning center and proposed professional development training and activities. Chapter 6 discusses the role of technology in educational planning, describing LACC's learning community approach, while chapter 7 reviews issues related to financing new technologies, including schedules of recurring and projected expenditures. Chapter 8 provides policies and procedures related to the use of computers and networks, educational media, electronic mail, requests for allocation of resources, and equipment disposal and recycling. Chapter 9 presents the plan of action, including immediate, midterm, and on-going recommendations. Appendixes provide supporting documents, including diagrams of network cabling, organizational charts, and fair use guidelines; the California Community Colleges telecommunications plan; and sample forms. Contains 43 references. (HAA)

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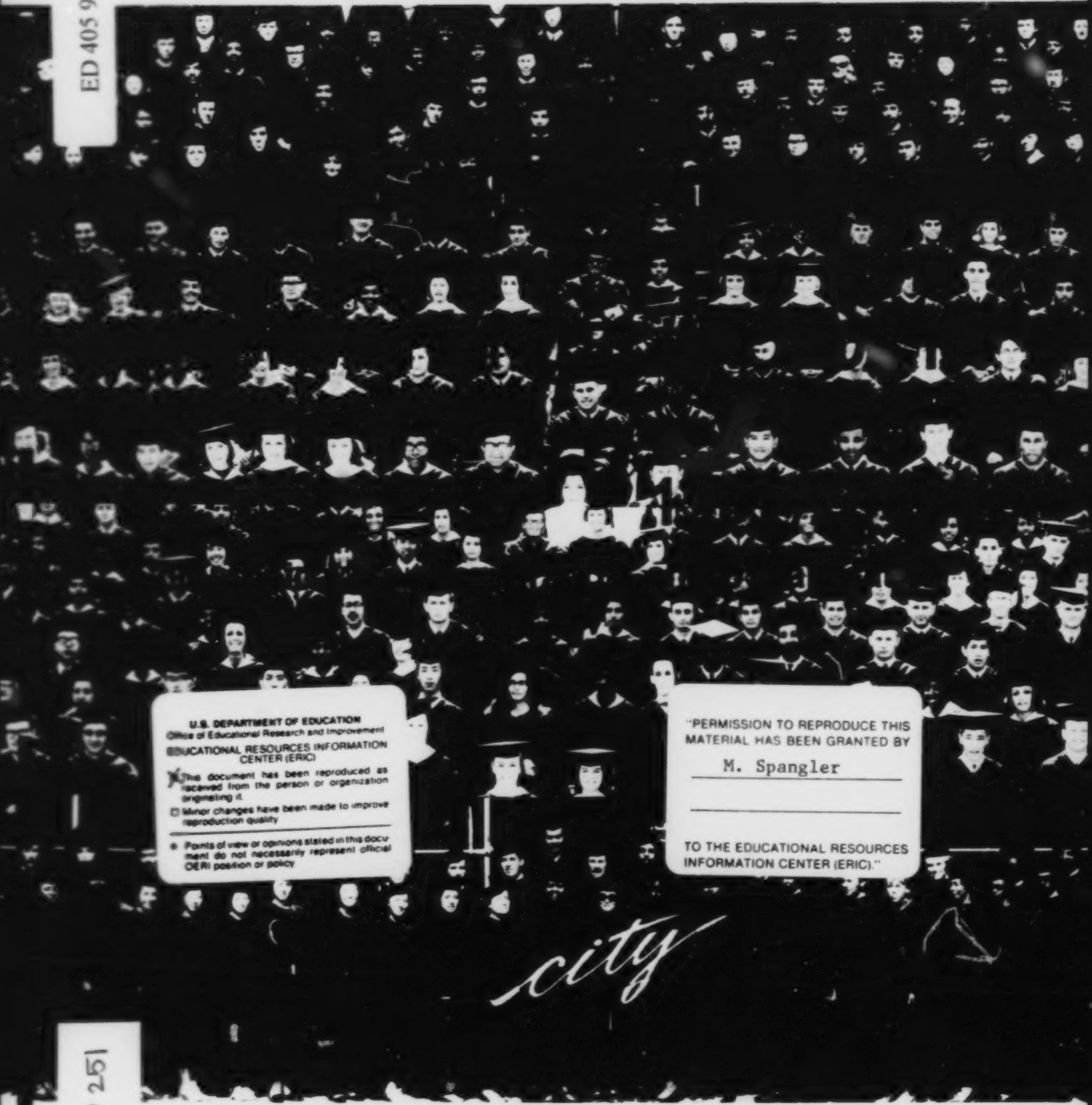

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LOS ANGELES CITY COLLEGE

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Strategic Plan for Information Technology, 1997 - 2002

Communication, Cooperation, and Collaboration

Presented by

The InfoTech Committee

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The plan is a document of the *Information Technology Committee*, Mary Spangler, Ed.D., Chair. The *Information Technology Committee* is a Standing Committee of the *LACC Shared Governance Council*, Henry Ealy, Chair.

Los Angeles City College

Vision Statement

With the commitment and active participation of all the students, staff, faculty, and administrators who make up Los Angeles City College's progressive and adaptable campus family, by the year 2001 we will again become an important center of culture and learning in downtown Los Angeles. Working together we will restore Los Angeles City College's campus, transforming it into a clean, safe, attractive and supportive environment for every student who has the will to learn. We will emerge at the beginning of the next century as a center of educational excellence, with a city-wide reputation for empowering students through innovative academic programs and individualized support services. Our ultimate goal by the end of the planning cycle is to shape Los Angeles City College into an energetic and harmonious community that inspires in all of its members a deep appreciation for the new and the different, an abiding spirit of tolerance and mutual respect, and a passion for lifelong learning.

Adopted Fall 1996

Preface

The materials in this document represent the work of many people over many months. The document is meant to be a dynamic instrument, and so it should be reviewed regularly and modified as the changing needs of the college dictate. In order to integrate the philosophy expressed in Chapter 2, a regular review should occur under the general direction of the Institutional Planning Committee in tandem with the other key planning committees on campus—Educational Planning, Budget, Facilities Planning, Work Environment, Staff Development—and with the decision-recommending guidance of the Shared Governance Council, of which the Information Technology Committee is a standing committee.

For the record, specialized chapters were developed by individuals or groups already responsible for creating and/or implementing policies in those areas. Chapter 5—Staff Development—was written and approved by the Professional Development Committee of Staff Development, a committee of the Academic Senate. Chapter 6—Educational Planning—was written by the Educational Planning Committee, a committee of the Academic Senate.

To keep the document manageable and thereby encourage its active and regular use, discussion of an issue is limited, where possible, to a single chapter. Where the issue cuts across chapters, the reader is referred to the appropriate chapter. Recommendations are presented in their entirety in Chapter 9 with references to chapters where they are discussed.

In Fall 1996, the college received approximately $1 million from the State Instructional Equipment Fund to purchase equipment for instructional purposes. A significant portion of those funds will be used to begin meeting the goals and objectives outlined in this plan. Had the college not begun the planning process well before it was apparent that funding would be available, it is likely that spending would have proceeded less systematically. As of this writing, it appears that funding for instructional equipment for next year will allow the college to realize additional goals and objectives of the InfoTech plan.

On a personal note, facilitating the development of this document has been a tremendous learning experience and a daunting responsibility for me. Before its completion, requests for copies of it have come from several different sources, and the materials and methodology have been presented at one state conference and have been selected for presentation at a national conference. I want to publicly express my appreciation to all those individuals—duly noted in Chapter 1—who worked with me to provide insight, support, energy, and good will for the benefit of the students, faculty, and staff of Los Angeles City College.

Mary Spangler, Ed.D.

Vice President, Academic Affairs
Chair, InfoTech Committee
January 1997

Cover Graphic, Lee Whitten, Chair, LACC Art Department

A Look Into the Future (or Is It the Present?)

The following selection was found on the Internet and sets the tone for *LACCs Strategic Plan for Information Technology: Communication, Cooperation, and Collaboration*.

> "We are in the age of 'Everything-Everywhere,' the 'Placeless Society.' The way we live, work, and govern ourselves is about to plunge into a fundamental shift, a major break from old trends.
>
> For the individual, the most important single factor in adapting to the Placeless Society is the ability to embrace change, new paradigms, and technologies and to use the new realities as levers to ease our work. Those who cling to old methods, or believe that somehow their situation is different, will be surpassed by those who know how to deploy the new tools.
>
> Growth will happen for those who will use and develop technology, those who respond to fundamental demographic shifts, those who will help society's organizations adapt to new and seemingly absurd operating rules—management consultants, human resource specialists, international lawyers and bankruptcy lawyers, environmental engineers, and, alas, government administrators.
>
> The world will not be unemployed but rather REDEPLOYED, and there will be jobs for those offering needed talents and possessing extraordinary skill."

Where will each of us fit into this new age?

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Chapter

1

Introduction

History of The Planning

1.1 Background

During Spring 1995, in consultation with the Academic Senate and AFT College Guild, it was determined that Los Angeles City College needed a master plan for information technology. A recent major acquisition of 125 computers for one department that had been using equipment incapable of running applications necessary to its curriculum highlighted the need for a systematic process for acquiring, recycling, maintaining, and financing major computer and computer-related purchases.

Recommendations for establishing a strategic plan, including key issues and questions to address, were prepared by the Vice President of Academic Affairs at the request of the Shared Governance Council (SGC), as discussed at its meeting June 12, 1995. A report that identified the need to develop and implement an on-going strategic plan for the acquisition of information technology and its integration into the college's instructional program was presented to the President and the SGC during the summer.

Such a plan, it was agreed, should be the result of a college-wide effort formulated by a broad and representative constituency. A process was initiated to form a core committee and empower it to develop the master plan.

1.2 Information Technology Core Committee

1.2.1 Formation of the Core Committee

In September 1995, the President wrote an open letter to the college community that

- requested a formal process to develop a college plan for investing in instructional technology;
- identified the leadership role of the Office of Academic Affairs in *facilitating* the campus discussion and planning;
- asked that policies and strategic plans be developed, with faculty and academic programs having the highest priority; and
- acknowledged key elements of communication, cooperation, and collaboration among a wide range of faculty and academic support services.

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The President then authorized a representative group to be formed in order to develop recommendations for short- and long-range plans. He called for volunteers across the college to participate in several Open Forums to express their concerns and raise issues that needed review. More than forty individuals responded to the invitation. Thirty faculty, staff, and administrators attended at least one of the sessions. Careful notes were taken and later compiled and categorized for consideration during the planning stages.

Finally, the President empowered a planning committee headed by the Vice President of Academic Affairs as the facilitator/chair and the Chair of Academic Computing as the vice chair to address objectives and present recommendations to SGC within an identified time frame of Fall 1996. Based on the interest, availability, expertise, and varied representation, and after consultation with the Academic Senate and AFT College Guild, the Vice President of Academic Affairs recommended the makeup of the committee to the SGC and received approval.

1.2.2 Charge to the Information Technology Committee

The InfoTech Committee was charged with the development of a set of guiding policies and processes for the acquisition of information technology and its integration into the instructional program. As the committee evolved in its work, the scope enlarged to include administrative computing since the literature in the field indicated that the direction of computing in institutions of higher education was toward merging the areas rather than bifurcating them.

1.2.3 Components of the Strategic Plan

The following components form the basis of the original plan presented to the SGC:

- Philosophy, Vision, Mission, Strategic Principles, Goals, and Objectives (Chapter 2)
- Physical Resources: Infrastructure, Hardware, Software (Chapter 3)
- Organizational Support: Structure and Staffing (Chapter 4)
- Staff Development: Training (Chapter 5)
- Educational Planning: Instructional Applications (Chapter 6)
- Financing Technology: Budget (Chapter 7)
- Information Technology Guidelines: Policies and Processes (Chapter 8)
- Plan of Action: InfoTech Recommendations (Chapter 9)

1.2.4 Core Committee Membership

The membership was composed of individuals from all constituencies and drawn primarily from those participating in the Open Forums or expressing their willingness to be involved. Departments with computers or the urgent need for computers were encouraged to participate with only one individual in a department included, the preference being the department chair or a designee. During the first year, the membership increased by several individuals representing key areas. A District administrator was also invited as a liaison.

Robert Alworth	*Director*, Information Technology, District Liaison
Raymond Badalian*[1]	Mathematics Department
Kathleen Beaufait*	Speech Department
Jane Blomquist*	*Chair*, Music Department
Elaine Carter*	Chemistry Department
Ren Colantoni	*Chair*, Academic Computing; **Vice Chair**, InfoTech Committee
Gary Colombo*	*Vice President*, Academic Senate; Curriculum Committee
Art Freeman*	Business Administration Department
Dorothy Fuhrmann*	*Chair*, Library
Richard Guy	*Building & Ground Administrator*, Administrative Services
George Holmes	AFT representative ('95-'96); *Chair*, ACETEC Department
Roberta Holt	*Coordinator*, Staff Development
Alexandra Maeck*	English/ESL Department
Rolf Mendez*	Cinema/TV Department
James McCullough	*President*, Associated Student Organization ('95-'96); student
Linda Motonaga	AFT Classified Staff representative
Joyce Moore*	*Chair*, Office Administration Department
Amel Pascua	*Senior Microcomputer Systems Specialist*, Administrative Services
Rod Patterson	*Dean*, Academic Affairs
Willard Scott	*Manager*, Instructional Multimedia Services
Martha Sklar	AFT representative ('96-'97); *Director*, Transfer Center
Mary Spangler	*Vice President*, Academic Affairs; **Chair**, InfoTech Committee
Earl Walter, Jr.	*Associate Dean*, Student Services
Kelvin Williams	*President*, Associated Student Organization ('96-'97); student

---

[1] *Academic Senate representatives appointed by the Senate president.

1.2.5 Core Committee Methodology

All committee meetings were open to all members of the college community who chose to attend. After a full discussion the InfoTech Committee determined that it would operate by consensus, not by majority vote. The members agreed that no recommendation or plan would be forwarded unless there was agreement from all the members. An issue would be discussed and resolved until it represented a position that all the actively participating members could support comfortably. Consequently, no voting occurred or was recorded.

The committee produced standard agendas and minutes. Agendas were distributed in advance of regular meetings, and copies of approved minutes were submitted to the SGC regularly. Meetings were held twice a month for 1-1/2 hours, beginning in Spring 1996 and monthly during the summer. With the goal of completing a draft plan by the end of Fall 1996, the main committee broke into subcommittees to draft separate chapters and then review them during the general meetings. The schedule was shifted so that once a month the general committee met and the second scheduled meeting was set aside for subcommittees to work on their drafts.

It should be noted that the InfoTech Committee had an integral part in developing recommendations for the expenditure of the 1996-97 State Instructional Equipment Fund one-time block grant of $851,000 and on-going block grant of $164,000 from the State Chancellor's Office. Three members[2] sat on the *ad hoc* Allocation Committee,[3] and two members served as non-voting technical advisors[4] for the information technology-related requests. In addition, before final recommendations were forwarded to the Academic Senate for approval, they were submitted to the InfoTech Committee for review and discussion.

InfoTech bulletins were composed, printed, and distributed campus-wide each month to inform the college of the nature and rate of the committee's progress. Important dates and announcements were included in the regular news notice *This Week*. The SGC also received minutes and regular progress reports.

Surveys were conducted, as determined by the committee to identify issues directly related to planning. During 1995-96, a survey form to inventory computer hardware and software was developed and distributed to all departments and areas. Results were tabulated for later use. Another survey to identify instructional practices involving technology was also developed and distributed to all faculty, full- and part-time. (See D.1 and D.2 surveys in *Appendix D*.)

A small library of current articles relating to the InfoTech Committee's charges was established in the Office of Academic Affairs Accreditation Library in AD208. These articles were available and updated for committee members to review for ideas, information, and direction. In addition, articles applicable to specific issues were distributed at meetings. (See B.1 General Information Articles in *Appendix B*.)

Early in the planning process, the committee agreed that the technology plan would be presented to the SGC for approval in its entirety, rather than piecemeal. However, basic concepts involving vision, mission, and goals were submitted to the SGC for approval as these concepts were developed. When it was necessary to develop policies to address particular issues, the policy recommendations were submitted for approval immediately. More challenging issues like budget, organizational structure, and staffing were not submitted in this manner. Instead, the whole plan, including recommendations, was presented to the SGC at the end of the process. Other committees (*i.e.*, Department Chairs Council, Budget, and Facilities Planning) needing to respond to or approve recommendations also had an opportunity to reshape the recommendations. The rationale was that the parts of the plan were interrelated and dependent on the whole for their logic. An integral part of this methodology was to urge that the approving bodies *not* change recommendations unilaterally but ask the InfoTech Committee to readdress any counter-recommendations raised or concerns expressed. Ultimately, it was expected that the SGC would approve the final plan and pass it on to the President for implementation.

---

[2] Mary Spangler, Jane Blomquist, and Roberta Holt were voting members.

[3] Information on the structure, function, and procedures for this committee is part of the Educational Master Plan.

[4] Ran Celentoni, Director of Academic Computing, and Arnel Pascua, Senior Microcomputer Specialist.

1.2.6 Committee Site Visits and Contacts

Before and during the planning process, committee members visited or contacted the following institutions to observe their technological arrangements. These included

American River College, Sacramento, CA

California State University, Los Angeles

California State University, Northridge

DeAnza College, Cupertino, CA

Estrella College, Phoenix, AZ

Foothill College, Los Altos, CA

Fullerton College, Fullerton, CA

Mesa College, Phoenix, AZ

Mount San Antonio College, Walnut, CA

Phoenix College, Phoenix, AZ

Rio Hondo College, Whittier, CA

Rio Salado College, Phoenix, AZ

University of California, Los Angeles

University of Oregon

University of Southern California

1.3 Strategic Plan Format

The committee reviewed and approved the format for the document early in the planning process. An outline draft was also presented to the Shared Governance Council (SGC) for its input and approval. Each component listed in *Section 1.2.3* is addressed in its own chapter.

To ensure consistency with the development of other segments of master planning (*i.e.*, Educational Planning, Facilities Planning, and Budget) already in process, an outline draft of the plan was distributed to those committee chairs for their input and recommendations. The Institutional Planning Committee, chaired by the President and consisting of the chairs of the key planing committees, also reviewed the document at different stages and determined that the strategic plan developed by the InfoTech Committee would become a key component of the LACC Master Plan.

Goals and objectives were aligned to support the college-wide goals. Drafts of the developed sections of the emerging plan were regularly distributed to the InfoTech Committee members for suggestions, additions, corrections, and general accuracy.

The committee developed a number of recommendations in each chapter. For the sake of space, the recommendations are presented in their totality in Chapter 9 where they are referenced to the chapters from which they were developed.

Chapter
2

Philosophy
Vision and Mission

2.1 Background

The members of the InfoTech Committee spent the Spring 1996 semester developing the rationale, guiding principles, and conceptual framework for the Strategic Plan. The committee related the plan's goals and objectives to the college's goals and objectives where appropriate and feasible. In addition, underlying assumptions from the individual chapters are included in *Section 2.4*. The final draft of Chapter 2 was presented to the Shared Governance Council (SGC) for its consideration May 20, 1996, and was unanimously approved June 17, 1996.

2.2 Vision

It is LACCs vision for Information Technology that the college be a leader in encouraging, empowering, and supporting the college community in the effective use of technology and in the college's development as an "electronic campus."

2.3 Mission

Through a college-wide network, it is LACCs mission to provide and facilitate

- access to the most current technology;
- assistance in developing the skills and knowledge of each and every student, faculty, and staff member to become information and computer literate; and
- the freedom and opportunity to expand and apply that knowledge in teaching, learning, and working.

2.4 Assumptions

1) Technology will increasingly be brought to the classroom and continue to become more complex. All community colleges in California will eventually be linked to CSUnet. Distance learning and alternative forms of instruction are unresolved issues at this time.

2) The expenses of technology will require adjustments or shifts in college priorities and resources. Developing outside sources of funding, including partnerships with companies for equipment and resources, will be essential. It is expected *limited* outside money for equipment and personnel will be available through State Instructional Equipment Funds.

3) The need for equipment, access to it, personnel, support services, and training will increase with time and be critical to a functional plan. This support includes the professional staff to install, maintain, and repair equipment, to assist in developing instructional materials, and to supervise computer laboratories. Staffing recommendations are based on FTES for students and head count for faculty, staff, and administration.

4) Equipment obsolescence results in loss of students and limits relevant teaching. Prices will stay fairly constant for increasingly sophisticated equipment. Due to budgetary limitations, the college cannot expect to offer state-of-the-art computer instruction in all instructional areas.

5) Students matriculating at LACC will increasingly need basic computer literacy both to further vocational goals and to benefit from further educational opportunities.

6) While computing will grow in importance, because of funding limitations LACC will not become a "virtual campus," nor will it be in a position to compete on-line with institutions like UCLA or USC.

2.5 Goals and Objectives

Goal 1

To obtain, develop, and/or expand, as appropriate, the necessary components of the information delivery system.

Objectives

- Conduct an inventory of all college computers and their instructional uses.
- Draft a strategic plan for future deployment of campus computer stations.
- Renovate and expand the Library into a technologically advanced, attractive learning resources center.
- Support the district-wide Library Automation and develop access to library resources using technology, such as Internet access and multimedia.
- Identify resources to upgrade and maintain the All-College Computer Lab.
- Develop recommendations and a schedule to implement e-mail, Internet access, voice mail, and additional FAX machines to explore alternate forms of information delivery.
- Explore the possibilities and develop recommendations for offering courses via Distance Learning and/or the Internet, including creating and equipping a location for video conferencing and upgrading the college's satellite downlink capability.

- Provide every student with the opportunity to have e-mail and access to the Internet from different locations on campus.

Goal 2

To ensure that all components of the system are current, fully functional, secure, equitable, cooperative, collaborative, and multidisciplinary.

Objectives

- Develop a replacement schedule for all computers.
- Assess personnel needs for current and future computer labs.
- Develop recommendations to provide support personnel for administrative and academic/instructional computing facilities.
- Standardize—to the extent feasible—hardware and software across campus.
- Provide instructional technology for classroom presentations to enhance the teaching/learning process.

Goal 3

1) To extend both the breadth and quality of student learning by accommodating the wide range of abilities and interest in using computers for instructional applications and by developing skills necessary for utilizing information technology.

Objectives

- Provide faculty access to training and support to redesign curricula and teaching styles and to develop new approaches to utilizing technology.
- Support the Staff Development program as a critical component in preparing faculty and staff to apply the capacities of technology to enhance teaching and learning.
- Provide regular access to the most current information and training to key personnel with administrating responsibilities for the college's information technology resources.

Goal 4

To encourage LACC students to develop supportive relationships with faculty, staff, and fellow students and to engage them actively in the learning process.

Objectives

- Provide students with a carefully planned and implemented "learning community" to reap benefits from information processing technology.

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- Provide students lacking sufficient personal resources to purchase home computing systems with access to public computing facilities.
- Focus on *learning* with technology rather than *teaching* with technology.

2.6 Strategic Principles

The InfoTech Committee will be guided by a set of principles meant to accomplish its goals and objectives as successfully as possible. Early policies may be replaced eventually by more definitive policies based on accumulated experience and emerging patterns.

1) LACC will strive to provide, to the best of its ability, a rich array of information resources and instructional uses of technology for all who deserve and can benefit from them.

2) LACC shall regard funding for technology as an integral part of its planning process and be part of the final budget.

3) For the purpose of institutionalizing the use of technology across the college, a distributed system of resources which is broadly accessible will be pursued rather than a concentrated system.

4) For the greater good of LACC and in accordance with its plan, the InfoTech Committee will use a team approach to decision-making in formulating recommendations and will operate strictly by *consensus* of the members, not by majority vote.

5) Even in the face of system volatility, short-term decision-making will be made consistent with long-term goals as much as possible.

6) A systemic approach to planning will have a high priority while individual departments will maintain autonomy to utilize resources and equipment to meet their objectives.

7) The InfoTech Committee will develop and implement policies and procedures that are understandable, orderly, and efficient; that insure the equitable distribution of computer technology resources; and that advance the college's educational plan.

2.7 The Decision-Making Process

The InfoTech Committee is a standing committee of the Shared Governance Council (SGC) and reports its actions and recommendations to that body directly. However, the committee will also work in coordination with other committees as directed by SGC and/or the President.

The general process by which requests for equipment, staffing, or other resources come to the InfoTech Committee and its role in the decision-making process is outlined in the flow chart. (See A.11 "InfoTech Committee Flow Chart for Decision-Recommending" in *Appendix A*.) Specific circumstances may sometimes dictate that other processes take precedence as, for example, when State Instructional Equipment Funds are allocated for instructional purposes only.

Chapter

3

Physical Resources

Infrastructure, Hardware, and Software

3.1 District System Overview

District support for the college's information technology capability involves five areas. Each area identifies completed and planned projects. (See A.1 in *Appendix A*.)

3.1.1 Network

Faculty and students should have expanded access to the network through shared resources where necessary.

Completed: The district has installed equipment that lets academic and administrative networks coexist on campus. It has also connected the library to the administrative local area network.

Planned: Work with the campus to expand the instructional network. Upgrade campus Internet circuit. Help establish college policies for network usage.

3.1.2 Instruction

The district's computing and communications systems should help faculty teach and students learn. Faculty should be encouraged to introduce technology into their classes: i.e., e-mail communication, "electronic office hours," posting of class syllabi and instructional materials, and access to Internet resources.

Completed: The district has selected vendors for library automation software and hardware and has installed library automation hardware.

Planned: Make library automation operational. Work with campus planning committee to strengthen the support services for faculty.

3.1.3 Access

It should be easy for current and prospective students to obtain information about the colleges and conduct campus business. Students should be able to conduct a wide variety of business from home using touch-tone telephones and personal computers.

Completed: Students register by phone from 213, 310, or 818 area codes. They are referred to open classes by phone when the classes they select are closed and are referred to voter registration information. Expanded access includes ITV, widened the scope of phone services, and allowing students to file one application for admission to any of the district's nine colleges.

Planned: Provide telephone registration in Spanish and TDD registration services for the hearing impaired. Widen the scope of telephone services. Provide Web-based "self-service" registration. Support the flexible calendar pilot project. Support strategic enrollment management strategies.

3.1.4 Efficiency

The district's administrative processes should be automated wherever possible and operate in an integrated fashion for maximum efficiency.

Completed: The district has expanded online services on weekends and streamlined the process of adding classes. The electronic bank deposit of salary warrants is now available to all employees, and the pilot testing of transcripts is complete.

Planned: Move to full implementation of electronic transcripts. Develop an online registration appointment system. Expand automated pre-/co-requisite checking and begin automated co-requisite checking. Streamline class scheduling. Implement a position control system for staffing.

3.1.5 Infrastructure

The district's computing and communications infrastructure should be robust, accessible, adequate to its present and projected needs, and cost-efficient to operate.

Completed: The wide area data communications network is upgraded. DEC hardware capacity is expanded. Batch reporting is done by a separate computer to avoid interference with online processing. With the establishment of a "combined operations center," problems are resolved faster. Training videos and classes for support staff are available.

Planned: Further expand online service hours. Further upgrade DEC computers for more performance at reduced cost. Automate load balancing. Improve network monitoring and control. Provide adequate training for InfoTech staff, and work with campus planning groups on campus needs.

3.2 College System Overview

3.2.1 Current State of Los Angeles City College Network Systems

- Infrastructure

As of Fall 1996, LACC uses two network systems: the Administrative Information System and CITYnet. Both terminate in the Administration Building but are as yet not connected. The cabling plan is incomplete and was not designed to host multiple systems. In many places, such as the bungalow area, copper cable, which is inferior in quality compared with fiber, is still in use on the backbone.

The Administrative Information System employs a Local Area Network (LAN), using an Ethernet cabling scheme and Novell LAN software. The current cabling scheme provides a 10 Mbps data transmission rate. However, recent improvement in technology now permit transmission rates of 100 Mbps. The on-campus LAN is linked into a Wide Area Network (WAN) that includes the District Office and the other campuses that have frame relay lines (upgraded from leased to point-to-point circuits in 1994). The current circuits range from 384 Kbps to T1 with sufficient capacity expected through 1997. As new applications (*i.e.*, Library Automation) come online and as more graphical information is sent via the network from a variety of sources, this arrangement will need to be monitored.

Windows is expected to become the dominant desktop environment by the end of 1997. As older PCs are replaced by more powerful computers, the vast majority of newer PCs will be able to run *Windows*. New online applications will be developed with a web browser "look and feel." The Administrative LAN also has Internet access via the District Office and through CSUnet, the California State University system. Administrative networking is used primarily to exchange electronic mail and administrative information.

The second on-campus network, CITYnet, is designed to support the needs of instruction. Originally a three-year project, the initial installation connected three buildings (Cesar Chavez Administration Building, Jefferson Hall, and Franklin Hall). Installing these connections to new and existing student workstations was completed in 1989. However, when the second and third years of the project were not funded, the extension of the network to other buildings did not occur. This network utilizes a 16 Mbps Token Ring protocol and an IBM LAN Server software. Fiber cable connects the building, while copper distribution is used within connected laboratories.

Internet access is provided by CSUnet and is available to students and faculty via CITYnet either directly by a connected workstation in certain laboratories and offices or by dialing into the primary server. The dial-up service provides access to locations from off campus or from on campus where no network cable is available. CITYnet provides unlimited access for academic use, including electronic mail for faculty and students.

Computer laboratories dedicated for instructional purposes include the following:

ACETEC Department labs

Business Administration laboratories

English Writing Lab / CyberWriting Center

Library System (online Spring 1997)

Mathematics Laboratory

Physics Lab

Office Administration laboratories

Teaching-Learning Center

Also using computers in a limited manner for the instructional program are the Family and Consumer Studies and the Earth Science departments.

- **Hardware**

During Spring 1996, a survey instrument to assess the existing hardware on campus was designed and approved for distribution by the InfoTech Committee. (See D.1 in *Appendix D.)* The survey was sent to all department chairpersons. Results were incomplete despite two separate attempts to obtain 100% participation. As a consequence, the InfoTech Committee determined that departments approved for new or recycled hardware should first be audited for existing equipment. The current deterioration of equipment will accelerate over time, and the InfoTech Committee, as part of this plan, will develop a format and a process for replacing the obsolete or non-repairable equipment in a timely, organized manner and for recycling reusable equipment (See D.3 "Request Form for Recycled Computers" in *Appendix D.*)

The All-College Computer Lab (ACCL) in FH201 has the following attachments:

40 workstations that are nine years old and attached to CITYnet

10 workstations of later design

CITYnet has the following additional attachments:

35 workstations in the English Writing Lab (JH302)—generally obsolete equipment usable for simple word processing and Internet access

24 workstations in the Mathematics Laboratory (JH310)—current design and providing access to both networked and locally installed software specific to mathematics

4 machines in the Teaching/Learning Center—for faculty use

30 workstations in ACETEC (available soon)

Miscellaneous workstations: 2 in Physics, 1 in FC&S, 1 in Earth Science.

As of Fall 1996, all stations connected to CITYnet have or will have Internet access.

- **Software**

The software used in academic departments requires hardware capability beyond that of the workstations in the ACCL. In Fall 1993, 40,000 hours were logged by 2500 students in 20,000 visits to the lab. Through Spring 1995, over 273,000 cumulative contact hours were recorded. There are no records for the 1995-96 academic year since the District could not provide the seed files for the data-gathering station. The drop in hours may be attributable, at least in part, to the opening of labs elsewhere on campus and to the fact that departments are using software that cannot run on the current ACCL machines. These stations are used for text-based CAI and word processing, primarily WordPerfect 5.1. A catalog of available software will be developed and disseminated to offices and departments on the campus.

3.2.2 Future Plans for Los Angeles City College Network System

Based on the Fall 1996 condition of the network, the college does not have the infrastructure to support multiple systems—academic and administrative—as well as to provide access to the Internet and informational systems to departments located on the north end of the campus. Since the academic and administrative backbones are not interconnected, there is no access to the management information system for departments presently connected to the academic computing network backbone.

The ultimate plan is to interconnect the academic and administrative networks with fiber optic cable. Even though fiber is available in some areas on campus, 24-strand fiber is required for the administrative and academic networks to coexist on the same cable. Furthermore, this type of backbone would also expand the potential for other systems (*i.e.*, energy management, security, high-grade voice communications, and video conferencing). The proposed cable path is from the north end of the Cesar Chavez Administration Building to its south end. (See A.2 and A.3 "Cabling Diagram" in *Appendix A*.)

To interconnect the academic and administrative networks requires changes in hardware. Each building also requires additional hardware and cable distribution. Access to the management information system and the Internet is planned campus-wide once key elements are in place.

3.3 Service Contracts

The college currently has one contract with IBM for approximately 850 pieces of equipment, which covers about one half of those on campus. Previously, the college made few provisions for upkeep of the other systems, including staff to maintain the machines or spare parts to support that effort. A single individual now undertakes repairs without a parts depot for support. However, as the number of computers increases, these efforts will not be a satisfactory way to complete repairs of specific problems in a timely manner. It is understood that the costs to maintain a computer increase with age, regardless of a service contract.

Equipment generally comes with a one-year warranty against early failure. These warranties may be extended to two or three years at the original time of purchase for an additional sum. Service contracts from the original source of the product for the repair and upkeep of computer equipment are necessary, especially in the absence of adequate on-campus computer technical staff. Purchasing extended warranties in the absence of sufficient technical support will be included in equipment purchases. If and when a product goes out of warranty, the college should provide technical support and spare parts.

To streamline the task of maintaining equipment in working order, the college should purchase a standard manufacturer's brand of PC. Macintoshes should be purchased only for special tasks. Because vendors may provide loaner machines while the user's machine is under repair, the college might purchase generic equipment. Getting machines repaired under the initial warranty may be difficult, depending upon the brand and the local vendor. The manufacturer will deal with a problem at a customer's site either by requiring the customer to do his/her own repair under direction of a remote service office or by depending on the local vendor to act as the repair agent. The local vendor may be unable or unwilling to send someone to fix the product or provide technical or parts support.

Maintaining a truly generic system is generally less costly than a proprietary brand machine since parts for unique products are more costly. The college should select and maintain a directory of service contractors who have a reliable reputation and references with satisfied customers. In addition, contractors should provide published and actual response time to service calls along with costs incurred beyond the "base price" of the service. The manner by which parts, particularly for specific products, are procured by the vendor and the types of resources service personnel are given to work with by the vendor should be available on request.

3.4 Site Licenses

In the recent past, site licenses for software used on campus have been implemented or adhered to inconsistently. Some instructional departments have purchased licenses for specific needs. Administrative computing has purchased some licenses for its use. The status of the bulk of software used on campus has not been closely monitored, but future purchases will include appropriate licensing.

In an effort to reduce costs for software and use existing resources efficiently, it is the intention of the InfoTech Committee to develop and maintain a database of licensed software that can be easily available campus-wide. Typically, the college can obtain site licenses for software in three ways.

1. Purchase the licenses from a re-seller. This requires a re-seller to establish a contract with the district for a list of selected products to be made available at an agreed-upon price. Currently, the district has contracts with two re-sellers. When a department wishes to purchase a license for an item on the list, a standard request is submitted to the Office of Administration, which in turn issues a contract release order to the reseller. Typically, an initial purchase is made by the first user desiring a specific item, and the reseller delivers to the college a complete set of documentation, diskettes, or CDs with the product. Successive purchases are for a license to copy the release product on more workstations. This approach saves redundancy in product and should result in a lower unit price. It is the recommended option when a small number of copies are ordered or time to investigate other options is limited.

2. Establish a contract with a developer for a specific product. This approach includes licenses for a certain number of copies of the developed product. This option is normally used for specifically designed packages. It requires a contract and usually lengthens the process of acquiring the software.

3. Purchase directly from the manufacturer or its representative. Finding information on a manufacturer can be time-consuming but results in the lowest cost spent with the vendor. Volume and site licenses are often only available from them. (See D.4 "Direct Offer for Technical Support" in *Appendix D.*)

The site licenses currently available at LACC include

Word Perfect for Windows
Word Perfect for DOS
Microsoft Office Standard Edition
PageMaker
MS-DOS v 6.22
Windows 3.11
QuattroPro 3.0 for DOS
Dbase4
Paradox 3.5 for DOS
Windows 95
Lotus 123 for Windows
Mathematica
Lotus 123 for DOS

The college has not yet addressed licenses for DOS for each machine, although each machine when purchased came with a copy of DOS. Purchases of the early systems usually included DOS if they were bought from IBM. Since then, most purchases of more visible products (*i.e.*, Compaq, IBM, and Dell) have also included the DOS and/or Windows 95 or OS/2 licenses, as these companies are authorized Microsoft OEM's.

The servers on both the administrative LAN and CITYnet have licenses. Computers purchased as generic brands or assembled from parts and installed for use on a network are covered by licenses. DOS information on stand-alone machines is incomplete. Other application packages in current use have not been evaluated and, therefore, may need to be properly licensed.

While it is recommended that the district office take responsibility for site licenses of the most needed products in order to achieve economy of scale and minimize contract and legal paperwork, so far this has not occurred partly because other colleges within the district have selected different software products to be their "standard." As more workstations come online, the networks will deal with the distribution and variety to some extent.

The need for a centralized effort is very apparent with regard to record-keeping of site licenses, ordering, updating, and distributing products as new versions are released. These items have been unaddressed primarily because of a lack of a strategic plan and funds. In the absence of district efforts, the college will take the responsibility for these activities.

3.5 Security

Currently, several computer laboratory locations have monitored burglar alarms. The monitoring services cost about $10,000 per year for covering several zones in several campus locations. The recommended approach to reducing cost in the long term is to organize the entire campus into a single security zone, with separate sub-zones, all monitored under a comprehensive Energy Management and Security System (EMS). Such a system would monitor and control emergency response to unauthorized entry and interface with the fiber optic cable upgrade project.

Because there has been no comprehensive control of keys, particularly with respect to staff and faculty who leave the college permanently, unauthorized access to buildings and rooms with computers and valuable equipment presents a security problem. In addition, unauthorized persons have obtained keys in the past.

The extension of the security services to all buildings should be undertaken in stages. Most areas are currently covered, except the ACCL and the Martin Luther King, Jr. Library. Other locations have no security (*i.e.*, the English Cyber-Writing Center) or need more (*i.e.*, the Bookstore). Sensors recently installed for the current monitoring systems can be reused; others from earlier periods should be replaced, and others that would conform to the new EMS system should be added. The cost to operate the system after installation will be minimal.

3.6 Services

3.6.1 The Internet Project

The extension of the CITYnet system was completed during Spring 1996. This connection allows Internet access to the English Writing Laboratory. Phase 1 of the Internet Project was completed in Fall 1996. Several faculty in English/ESL Department are actively involved in the Internet and hypertext development. The Title III Mathematics Laboratory is also online.

There is a fully functional hookup to the Internet via CSUnet as the provider. The World Wide Web server has home pages for LACC and for several instructors and special programs. E-mail is available for the faculty and staff with 75 members dialing in and/or using e-mail service. Several departments have web sites or are working on them. The Student Services areas, under the direction of the Dean of Student Services, have web sites in the planning stages. It is expected that the web site issue will continue to expand as more departments and individual faculty see opportunities to provide academic information to browsers.

Phase 2 of the Internet Project involves plans to build an LACC Intranet to support kiosks and student-accessible stations for general information, admissions, guidance, locations of resources. This service will use the same infrastructure and protocols as the Internet. No additional purchases are required. The plan takes advantage of the existing setup more fully, and more detailed plans in this area will be developed.

Also planned is a method by which faculty can use Internet resources inside a tutorial on their subject, complete with animation, sound, and inter-activity. This service will be provided as part of a Master's program project that involves creating an Internet protocol-based authoring system for faculty in the non-technical disciplines. This service addresses the current trend in the business world for paper-less Internet-Intranet integration and design.

3.6.2 Macintosh Internet Connectivity

Kits for connecting Apple Macintosh's to the Internet are available. The kit contains all the software needed to connect to LACCs Internet site and World-Wide Web Home Page. The four high-density disks contain Netscape Navigator, a popular software for browsing the web. The shareware and freeware needed to connect seamlessly to the college's Internet site are also on the disks. The kit includes numerous articles explaining the Internet, a Hypercard self-guided tour of the net and the world-wide web, and step-by-step instructions for installing the software, "control panels," "extension," and "preferences" files. The user needs a Mac, a phone line, and a modem to complete the connection. The Teaching/Learning Center has additional information.

3.6.3 Library Automation Project

- ***Site Preparation***

  Some site preparation for the Martin Luther King, Jr. Library is completed. Monitors of the circulation system that interfere with the 3M book security system need to be moved or shielded. Because this model of the system is no longer being produced, it will not be supported indefinitely. New electrical outlets need to be placed. The installation of an air conditioning and ventilation system is crucial as additional computers are installed.

- ***System Hardware and Software***

  A recently purchased and installed DEC Alpha class computer will operate the library automation software. The DRA software contract was signed during Fall 1996. Scheduling, installing, and testing the system and training the library staff to operate the system are upcoming projects.

- ***LAN Expansion***

  The District is working on an upgrade for communication to the campuses. The library has a 12-cable connection to the campus Data Center, one step in the upgrade of the campus cabling. Sixteen network drops have been completed, and the project is paying for hub capacity for 32 ports. More drops will be needed as the system expands.

- ***Library Database***

  During 1996, a contractor converted the card catalog information from the nine college libraries into computer form. The "union" database is complete and will be loaded into the DEC Alpha computer following the installation of the DRA system. The contractor also printed bar-code labels for each book in the collection. The library staff completed the placing of bar-codes on the books during Summer 1996. The bar-codes identify each item in the system for the inventory and circulation system. The project budget paid for student workers to assist in this area.

- ***Student ID Cards***

  The circulation module will use bar-coded student ID cards to capture patron data. The project budget will purchase the necessary bar-code readers for the library.

- ***PCs***

  The standard PC is a 120 Mhz Pentium with 16MB of memory, 1.2GB hard disk, a 15" Super VGA monitor, 1MB PCI video card, a 3½" floppy drive, a mouse, *Windows 95* installed, and one-year on-site maintenance agreement. One of the workstations will be at the reference desk and will have a 17" Super VGA monitor and a 2MB PCI video card. Purchases in excess of the District's allotment will come from the college's budget

  The original recommendation that the system accommodate 430 simultaneous users was reduced to 150 to fit within the available budget, with 5 user licenses left open for access from outside the libraries. Accordingly, the college was allocated 16 PCs. The district committee recommended that the college purchase six of the allocated computers as a "good faith" commitment to the project, with the remaining computers to be purchased out of the project budget.

- ***Furniture and Related Items***

  The college will receive $400 per computer for items like furniture and lock-down kits.

- ***Future Improvements and Expansion***

  Increase the number of ports and workstations, including an ADA station with wheelchair access and software for vision and hearing-impaired persons.

  Increase the number of user licenses.

  Connect the computing labs, offices, and Learning Skills Center to the library computer.

  Provide dial-in access.

  Select journal citation indexes, and add more modules for serials (periodicals), check-in and acquisitions.

3.7 CCC Telecommunications Technology Infrastructure

3.7.1 Purpose

In 1996, the State Chancellor's Office announced that $9.3 million was provided in the 1996-97 State Budget Act to 125 eligible sites (106 colleges and 19 administrative sites not co-located with a college). The purpose was to connect these sites into an integrated telecommunications system by establishing necessary infrastructure capability for video teleconferencing, connection to CSUnet and satellite downlink. The expanded network resulting from this development will most likely be renamed C^3Net (California State University and Community Colleges Network).

The current CSUnet, the data network connecting all campuses of the California State University and several other educational entities, will be providing the data network for the California Community Colleges beginning fiscal year 1996-97. Further, funding is now part of the California Community Colleges' base budget. To receive its share of the funds as part of the February 1997 general apportionment, the college completed several necessary fiscal steps:

- The District Office filed a "notification and intent to participate" statement on November 8, 1996, regarding its willingness to participate in the expansion of its existing telecommunications capacity and infrastructure beyond its site's current levels. The Senior Microcomputer Systems Specialist from LACC attended a technical workshop regarding the funding process. In addition, the Vice President of Academic Affairs was identified as the District liaison for the Telecommunications project.

- As a participating college, LACC completed and submitted to the District Office on November 27, 1996, a certification of conditions for the receipt and expenditure of its allocation of $54,500. (See C.1 "Telecommunications Expenditure Plan" in *Appendix C*.) This process required the plan to detail the following components:

    1. areas of expenditure;
    2. relationship to other areas of technology and telecommunications expenditure;
    3. analysis of the plan's conformance to the applicable standards and guidelines;
    4. how planned expenditures would improve learning goals, student services, and administrative services functions.

The plan was then reviewed and adopted on December 11, 1996, by the Board of Trustees before being submitted to the State Chancellor's Office.

3.7.2 LACC Plan

The expenditure plan includes details of all required components in three separate categories.

- Plan A - $22,000

  LACC presently has a 56kbps connection to CSUnet. The college intends to use this allotment to upgrade the hardware, software, and communications line to support a T1 connection to CSUnet.

  Plan A funds will improve the accessibility and effectiveness of the college's network that currently provides access for all students and faculty to the Internet, resources that are being used in support of instructional programs.

- Plan B - $25,000

  LACC does not currently have any video conferencing equipment. This allotment will be used to purchase video conferencing hardware and software under the planned State contract. Equipment will include a 30 frame per second Codec, interface for three ISDN lines (384 kbps communications rate), 27" color monitor, microphones, and appropriate software.

Plan B funds will allow the college to communicate with other District colleges and beyond in transmitting and receiving curriculum that would otherwise not be accessible (*e.g.*, highly specialized courses, very low enrollment courses) and in recruiting new populations of students.

- Plan D - $7,500[5]

LACC currently has satellite downlink equipment with analog capabilities. Therefore, this allotment will be used to upgrade the satellite downlink equipment by providing digital capabilities. Equipment will include one digital television receiver/decoder and one digital KU-Band converter.

Plan D funds will allow the college to improve and extend its participation to conferences, a resource that will enrich the instructional program and provide increased staff development opportunities (*i.e.*, conventions, town hall meetings).

3.7.3 Other Technology and Telecommunications Expenditures, 1996-97

The *ad hoc* Allocation Committee[6] evaluated a range of project requests totalling $2.9 million from 28 departments/areas for the $1,014,000 1996/97 State Instructional Equipment Fund block grant. The expenditures recommended for Phase 1 funding were college-wide technology projects that would benefit the college and students as a whole. They included

- installing fiber optic cabling to network the entire campus for academic purposes,
- ugrading the ACCL by replacing 40 obsolete computers, and
- replacing and expanding equipment in the Instructional Multi-Media Center (IMMC).

The process for receiving and reviewing requests for the funds was developed jointly by the Educational Planning Committee (EPC) and the InfoTech Committee with the approval and support of the SGC, the Academic Senate, and the President. In September 1996, after the President announced the application process, requests were submitted to the Office of Academic Affairs. According to the approved process, recommendations for Phase 1 funding were forwarded first to the InfoTech Committee and then to EPC. In addition, an emergency meeting of the Department Chairs Council was held to review the recommendations before being forwarded to the Academic Senate. The Senate approved the recommendations in December 1996 and forwarded them to the President. During Spring 1997, Phase 1 will move forward while Phase 2 requests will follow the same approval process as the first phase.

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[5] Plan C funds ($15,000) are available if a college currently does not have any digital or analog satellite capability.

[6] Six individuals (three from EPC and three from InfoTech) composed the committee that met to review all the projects and interview the submitters.

Chapter

4

Organizational Support

Structure and Staffing

4.1 Definitions

The *term academic computing* refers to services related directly to the instructional program and to instructional support, such as student-related services. It is distinguished from *administrative computing* which refers to services related to the administration of the institution, such as maintaining student records, financial data, and personnel records.

To prepare for anticipated expansion of information technology resources and their increased use in support and/or delivery of the instructional program, plans for organizational structure and staffing are divided into three areas: *Current* refers to conditions existing in Fall 1996. *Phase 1*[7] refers to plans for years 1 to 3. *Phase 2* refers to plans for years 3 to 5.

As a general criterion, the ratio[8] of support staff to technology users depends on the level or type of use required by the user. Users are divided into three broad categories. The ratio for "power users"—those who develop their own applications and always need the newest and fastest—is 1 (support staff):30 to 50 (users). The ratio for "middle-of-the-road users"—those who use a common suite of applications or use servers for database decision-support or work-group support (*i.e.*, Lotus Notes)—is 1:60 to 100. The ratio for "general office workers"—those who use a standardized suite of applications, need access to file and print servers, and use host-based legacy applications—is 1:125 to 300. Recommendations for a reasonable level of staff support to meet student, faculty, staff, and administrative demand are based on Full-Time Equivalent Student (FTES) for students and Full-Time Equivalent (FTE) for faculty, staff, and administration. The ratio of 1:300 is used as a measure of need, because of the range of abilities, access needs, and application uses among all potential users.

The number of potential users is based on 1995-96 data.

Student users = 9600 FTES
Faculty users = 400 FTE
Staff users = 500 FTE
Administrative users = 25 FTE

Total potential users = 10,525 FTE/S ÷ 300 = 35 optimum staffing

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[7] Phase 1 covers academic years 1997-2000; Phase 2 covers academic years 2001-2003.

[8] The network support staffing ratios are recommended by Gartner Group, an international information technology consulting service.

4.2 Administrative Computing

4.2.1 Current Organizational Structure

The Dean of Administration supervises administrative computing services. Administrative computers are located primarily in the Cesar Chavez Administration Building (Academic Affairs, Student Services, Administrative Services, Admissions and Records, Counseling, College Police, Student Assistance Center, and Business Office). Other administrative computers are located in the DSPS and EOPS bungalows, Martin Luther King, Jr. Library, Financial Aid Office, Matriculation, International Student Center, Plan Facilities, Bookstore, Student Activities, Community Services, and ITV.

Receiving services for an administrative computer requires the completion, submission, and approval of a work request order. Costs involved are charged to the account of the requesting office. Work is generally completed within one week's time unless a part is not available or the account to be charged does not have adequate funds.

The assigned responsibilities of administrative computing occasionally overlap or are blurred with respect to academic computing. As the demand for computing services increases and resources are strained, unnecessary duplication and ambiguity should be reduced.

4.2.2 Current Staffing

The LACC Data Center is directly headed by the *Senior Microcomputer Systems Specialist*. This position supervises a staff of four, including a *Programmer Analyst*, a *Microcomputer Systems Specialist*, and two half-time *Assistant Programmer Analysts*. The microcomputer systems position and one half-time programmer position are vacant and un-funded. An *Office Assistant* provides clerical support. This staff services approximately 1050 FTE/S. (See A.4 "*Current* Organizational Chart for Administrative Computing" in *Appendix A*.) An automated inventory control system would assist in monitoring the equipment, its location, maintenance, warranties, and service contracts.

Total current staff = 3.5

4.2.3 Current Responsibilities

The *Senior Microcomputer Systems Specialist* is directly responsible for insuring that all computing functions on the campus and between the college and District Office are functional, serviced, upgraded, replaced, and installed. As the technical manager, this individual oversees the MIS regarding personnel, funds, and equipment resources; installs and maintains all network software; and establishes and implements local network policies, procedures, and standards.

The *Programmer Analyst* assists users in adapting to electronic data processing, recommends computer system requirements and techniques for processing information, prepares programs for computer operations, maintains and revises existing programs and systems software, assists in complex programming, and corrects operating problems.

The *Assistant Programmer Analyst* (.5) analyzes data related to work processes and procedures being converted to a computer-based system, assists in identifying program problems, revises assigned programs as system changes occur, conducts program tests, writes documentation reports, and designs data forms.

4.3 Academic Computing

4.3.1 Current Organizational Structure

The Vice President of Academic Affairs supervises academic computing services through the Director in the Office of Academic Computing. Academic computers are located in the All-College Computer Lab (ACCL) in Franklin Hall 201 and in labs associated with instructional departments. These include the Business Administration, Office Administration, English/ESL, and Mathematics departments. Smaller computer labs are located in the Teaching/Learning Center and in the Physics, Family and Consumer Studies, Earth Science, and ACETEC departments, Learning Skills Center, GAIN (Plato lab) and Speech lab. The library is scheduled to be a fully installed site for approximately 16 computers during the 1996-97 academic year.

There is not a current codified procedure for requesting repair or support services. The relationship between the Director of Academic Computing and department chairpersons and faculty needing help is direct. The flow of information between academic and administrative offices is informal, and requests are responded to by either or both areas, depending on the hardware involved. However, responses to purchase, installation, and repair needs are limited since there is no technical support staff assigned to this area. IBM service contract calls are placed through the ACCL. Departments are not charged for academic computing services.

4.3.2 Current Staffing

- ***All-College Computer Lab***

The ACCL is headed by the *Director of Academic Computing*, a faculty member on a D-basis special assignment. This person supervises a staff of three *Instructional Assistants*, two full- and one half-time. All positions are currently filled. Up to fifteen student workers provide supplementary support. Additional positions have requested but not added to the staffing plan. (See A.6 "*Current* Organizational Chart for Academic Computing" in *Appendix A*.)

Total current staff = 3.5

- ***Departmental***

Individual department labs have Instructional Assistants directly assigned and reporting to the chair of that department. The assistants work in the labs with the students to provide hardware and software support and report to the appropriate Department Chair. Instructional support is funded in a department's regular budget. Staffing positions include

Speech Communication	1.0	Mathematics	1.2
Business Administration	4.8	English/ESL	1.0
Office Administration	2.8		

Total current staff = 10.8

The academic computing staff services approximately 4050 FTE/S.

4.3.3 Current Responsibilities

The *Director of Academic Computing* is currently serving .5 as the director of the ACCL and .5 as the director of Title III. Academic computing responsibilities generally include insuring that academic applications and equipment are functional, serviced, upgraded, replaced, installed, or relocated. Primary responsibilities are to maintain the ACCL, manage the IBM service contract covering an inventory of 850 pieces of equipment, and manage and operate CITYnet. Additional responsibilities include providing computer-related support and consulting on the use of technology to benefit the learning process.

Title III supervision (not strictly part of Academic Computing) will end in 1998 when grant funds expire although responsibilities are expected to be institutionalized at that time. Activities include directing the Internet Project to provide all aspects of support for this resource; overseeing and supporting other Title III computer centers (*i.e.*, the Mathematics Laboratory, the Teaching/Learning Center, and the English Writing Lab and Cyber Writing Center); upgrading and expanding the Internet Project; and integrating the library system with administrative system services where possible.

4.4 Phase 1

4.4.1 Organizational Structure

The existing division of services into administrative and academic computing and the accompanying responsibilities of the department heads will be maintained during this phase. The structure is functioning effectively; funds for additional staffing are limited; the relationship between the individuals overseeing both areas is strong and noncompetitive. However, the communication and interaction between the areas will be strengthened through written clarification of the reporting structure and responsibilities. Several benefits are to be realized from using existing resources more effectively:

- delaying the need for additional supervisory support,
- implementing a consistent, predictable procedure to request services,
- improving response time for receiving services,
- minimizing duplication of effort, and
- improving communication with faculty and staff.

The two supervisors and the senior administrators to whom they separately report will meet regularly to coordinate duties and responsibilities and to review unnecessary duplication of effort or delay in providing services. In order to obtain technology service, all personnel (faculty, staff, and administrators) should submit requests on an electronic Request for Work form. A quarterly status report of services and projects should be submitted to the InfoTech Committee for review, evaluation, and recommendations.

The feasibility of creating an information hub by combining both administrative and academic computing the same location—the Administration Building—will be reviewed. It will be necessary to provide communications equipment to transfer between the two systems; however, a cost savings can be expected. Currently, being physically housed on either end of the campus limits communication between the two separate and distinct systems. It is important that neither division be totally dependent on any one individual.

Additionally, a comparison among extended 3-year warranties for new hardware, an IBM service contract to include those purchases, and/or an on-campus computer technician should be conducted to determine which alternative is most cost and service effective.

4.4.2 Staffing

The college should expect to increase staff gradually. The number of computers and their locations will expand inevitably as new equipment is purchased and existing equipment is recycled. New computer sites will include the Martin Luther King, Jr. Library, Music Department, Learning Skills Center, Teaching/Learning Center, and the Cinema/TV/Media Arts Lab. In order to meet the anticipated growing demands for administrative and academic computing services, both areas will need additional technical support.

To provide services from the **Data Center**, the vacant/unfunded *Microcomputer Systems Specialist* position should be filled. In addition, one *Computer Technician* and one *Electronics Technician* position should be created, funded, and staffed and report to the Microcomputer Systems Specialist. The vacant/unfunded .5 *Assistant Programmer Analyst* position should be filled, and both assistant positions should report to the Programmer Analyst directly. The Office Assistant position should be reclassified as an *Automated Systems Assistant.* (See A.5 "Proposed Organizational Chart for *Phase 1* Administrative Computing" in *Appendix A.*)

Proposed additional staff = 3.5

To provide services from the **ACCL**, one *Microcomputer Systems Specialist* position should be created, funded, and staffed and report to the Director of Academic Computing. Services should be distributed among the ACCL, Teaching/Learning Center, Math Lab, and English Lab. (Title III funds are available to maintain the position from January 1997-98. After January 1998, the position of Microcomputer Systems Specialist in the ACCL will require Program 100 funds for continuing support.) A *Computer Technician* position should be created, funded, and staffed and report to the Microcomputer Systems Specialist. Instructional assistance should be the responsibility of the three current Instructional Assistants who will continue to report to the Director of Academic Computing. Some overall coordination of Instructional Assistants funded by individual departments and reporting directly to the department chairs should be considered in order to avoid unnecessary duplication of resources or overlapping of effort. (See A.7 "Proposed Organizational Chart for *Phase 1* Academic Computing" in *Appendix A.*)

Proposed additional staff = 2.0

With the additions itemized above, the combined number of administrative and academic computing staff would increase from 17 to 22.5 in Phase 1 with an increase in service from the current 5100 to 6750 FTE/S. When feasible, new positions should be created by shifting vacated positions in other areas to technical support areas. When shifting is not feasible, new positions should be added to the college's staffing plan.

4.4.3 Responsibilities

The *Computer Technician* provides technical support for computer equipment that requires repair, installation, or replacement.

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The *Electronics Technician* provides technical support for non-computer equipment that requires repair, installation, or replacement.

The *Assistant Programmer Analyst* (.5) analyzes data related to work processes and procedures being converted to a computer-based system, assists in identifying program problems, and revises assigned programs as system changes occur. This person conducts program tests, writes documentation reports, and designs data forms.

The *Automated Systems Assistant* serves as a resource person on the methods, procedures, and use of personal computer-related software and peripheral devices and provides technical direction to office staff in resolving operating problems.

The *Microcomputer Systems Specialists* have primary responsibility for administrative and instructional support. The instructional position would

1) direct the Internet Project by operating the attachment to the Internet via CSUnet, checking its routine operation, providing software and instruction to faculty and staff on its use of the resource, maintaining the college web page, and generating web resources.

2) oversee other Title III projects by maintaining the 24-workstation Mathematics Laboratory, supporting the Physics Department mobile laboratory and the English Writing Lab and Cyber Writing Center, and providing technical support to the Teaching/Learning Center

3) provide computer-related support and consultation by furnishing technical support and software/hardware installation, demonstrating how technology can augment learning, and encouraging its use in the learning process.

4.5 Phase 2

4.5.1 Organizational Structure

It is expected that the services of administrative and academic computing will continue to expand and overlap even more during Phase 2. (See A.8 "Proposed Organizational Chart for *Phase 2* Computing Technology" in *Appendix A*.) If the physical systems are housed together, the college can continue to maintain a dual technology system to keep the administrative and academic functions separate. This separation will maintain the security of records and allow faculty and student access without a negative impact on administrative computing needs. A bridge between the two systems, provided by programmable routers, will restrict switching between the two systems only to users with a need to know.

4.5.2 Staffing

Additional staffing positions will be phased in as vacancies are shifted from other areas to meet the growing need. A clerical position and two Instructional Technology Assistants will be needed in the ACCL. Technology staff will increase by 3 to 25.5 and serve 7650 FTE/S.

4.5.3 Responsibilities

Two *Instructional Technology Assistants* are responsible for instructional support for faculty.

The *Office Assistant* provides clerical support to the Director of Academic Computing.

4.6 Staffing Summary

Currently 17 support staff service the college's computing needs of approximately 5100 FTES, despite the fact that for 1995-96 the number of FTE/S was 9600. Based on the recommended ratio, projected staffing needs indicate the optimum staffing level of 35 by the end of Phase 2; however, plans call for a moderate total of 25.5 support staff with the recognition that staffing levels will still need to be increased. To meet the un-addressed staffing needs within financial limitations, a combination of strategies will be necessary.

- Submit all requests for additional technology staff to the InfoTech Committee for review as part of the approval process.
- Fill vacant and un-funded positions.
- Shift vacated staffing positions to computing from other areas.
- Create new positions as access to computing increases.
- Develop a student intern program in Computer Technology and CSIT to provide opportunities for on-the-job skills while studying.

4.6.1 Organizational Staffing Chart

	Current 1996	**Phase 1 1997-2000**	**Phase 2 2001-2003**
Organizational Structure	Keep both areas separate; improve flow of information between them.	Coordinate both areas while maintaining separateness; minimize duplication of effort by strengthening communication.	Cross-train both areas to coordinate computing activities and provide knowledge of both systems.
Staffing Positions	Senior Microcomputer Systems Specialist (1) Programmer Analyst (1) Asst. Programmer Analyst (.5) Office Assistant (1) → Dir. of Academic Comput. (1) Instructional Asst. (2.5) Dept. Instructional Asst. (10.8)	Microcomputer Systems Specialist (2) Computer Technician (2) Electronic Technician (1) [Auto. Systems Asst.] Asst. Programmer Analyst (.5) [Intern Program CT & CSIT]	Instructional Technology Assistants (2) Office Assistant (1)
Total Staff	17.8	22.5	25.5
FTE/S Serviced	5100	6750	7650

Chapter

5

Staff Development

Training[9]

5.1 The Teaching-Learning Center (TLC)

The TLC was developed as part of a Title III grant obtained by the college in 1994 and has been funded by both Title III and Staff Development. Located in Franklin Hall 106B, the center will be expanded to Franklin Hall 106A in Spring 1997. As a multifunctional site that provides multimedia technology development, Internet training, and software training, the TLC is the center of technology training activities for both faculty and staff. Computer hardware and software, videotapes, books, and magazines are available for faculty and staff use. All computers in the TLC have Internet access.

5.2 Professional Development Training and Activities

Activities to support and encourage the use of technology in the instructional program and for administrative purposes will be developed as needed or requested. Training will be flexible to meet the demands of the users and current to maximize the capacity of the equipment. Examples of training and activities available to faculty and staff will include but not be limited to the following:

- Computer training workshops and classes
- Year-round workshops offered by the Staff Development program at a variety of times and in a variety of modes:
    - two-hour professional development workshops
    - short-term accelerated courses for 0.5 units of WSCH-generating credit
- Independent self-tutorial packages on a wide variety of software for use in the TLC or by check-out
- Technology symposia, such as a software symposium
- Technology mentors with expertise in using specific software
- Mentors for troubleshooting and assisting colleagues throughout the college community with Flex credit available

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[9] The material in this chapter was developed and approved in October 1996 by the Professional Development Committee, a subcommittee of the Academic Senate.

- Resource library of software, videotapes, and publications
- Support of conference attendance when possible and appropriate
- Scheduled sharing of materials and information provided by conferences attendees
- Small group training and one-on-one training both in the TLC and on-site where computers are easily accessible

5.3 Staffing[10]

An ongoing core of students currently working in the disciplines heavily involved with software (*i.e.*, Office Administration, CSIT) and hardware (*i.e.*, Computer Technology) can benefit from an internship experience of one or two semesters. These students working in the TLC can also help faculty while developing job-related skills.

Students can apply software technology to assist faculty in meeting instructional needs. Students can also work to troubleshoot computer hardware problems.

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[10] Permanent staffing needs of the TLC are included in the discussion on organizational support in Chapter 4

Chapter

6

Educational Planning

Instructional Applications[11]

6.1 Statement of the Educational Planning Committee

Given the rapid pace of technological development, long-range planning for the instructional integration of information technology is at best a risky business. By the time a comprehensive plan for academic information technology can be developed, finalized, funded, and implemented, it is bound to be obsolete. What follows, then, is not a detailed blueprint but a sketch of principles that are meant to guide, not constrain, the alliance of information processing technology and classroom teaching at LACC.

This chapter offers an overview of the college's approach to academic information processing and a set of implications that are deliberately wide-ranging and open-ended to allow faculty and staff the chance to design and implement computer applications for specific fields and disciplines.

6.2 The College—An Electronic Oasis

LACC finds itself in a peculiar, but perhaps not a unique, position as it enters into the post-industrial era. In many respects the position of the college as an institution reflects that of the students it serves. Given the current condition of its information processing resources, the state of its finances, and the rapidity with which electronic education is growing, the institution is in serious danger of being left behind by the computer revolution. It is clear that, for the sake of the students, the college community cannot allow this to happen. At the same time, however, its members must recognize the institutional and demographic realities that surround the college.

Rather than trying to compete directly with four-year institutions as a major player in "Distance Learning"–and trying, in the process, to address the needs of a student population not currently served—the college must marshal its limited resources to become an "electronic oasis." Faculty must focus on offering students on-site access to the tools and technologies they will need to assure personal and academic success in an information-based culture. Instead of attempting to transform the college into a "virtual campus," faculty must integrate information technology into the curriculum in a way that will place it at the very heart of the campus–physically, philosophically, and pedagogically. To serve the students, the college is committed to becoming a city-wide electronic information resource center that offers the many communities it serves visible evidence that the future is not closed to them.

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[11] The material in this chapter was developed and approved on November 6, 1996, by the Educational Planning Committee, a standing committee of the Academic Senate.

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6.3 The Learning Community Approach

LACCs strength as an institution lies in the classroom and the ability of the instructors and staff to create a learning community that offers students a positive alternative to the fragmentation and negativity they often encounter in the urban environment they inhabit. If information processing technologies are to succeed at LACC, they must play a vital role in building that sense of community--and not serve as an additional source of fragmentation or present additional obstacles for students to overcome.

Electronic technology in the context of a learning community cannot replace or "stand in for" teachers, live classroom interaction, and experiential education. From a "learning community" perspective, information processing will enter the classroom in ways that strengthen connections between students and teachers and allow for richer, more frequent, and more creative interactions. This learning community model of academic information technology, for example, argues against the deployment of large anonymous computer labs where students engage in mechanized video drills and favors, instead, the use of computers as tools for developing classroom projects or exploring classroom-related problems through simulations.

This approach to instructional information processing emphasizes the central importance of faculty: individual faculty members will determine the role that electronic technologies will play in their courses and directly supervise student computer use whenever possible. In a genuine learning community, computers enter into the faculty/student relationship to enrich it, not to render it obsolete.

6.4 Extended Learning Communities

LACC also needs to explore instructional information processing as a means of linking the campus with larger learning communities around the world. Such linkages can be created through the use of the Internet and through electronic technologies like video conferencing, interactive classrooms, and satellite downlinks. Having the chance to connect with scholars and students with different backgrounds and perspectives will stimulate critical thinking and help students see themselves as fledgling members of the larger intellectual, professional, and vocational communities they seek to enter. Business students, for example, might work on a marketing project with their peers at a college in Detroit; composition students might exchange essays electronically with their counterparts at CSUN and offer ideas for revisions; students in Theater Arts or Music might share an electronic "performance space" with aspiring actors and musicians in New York.

This extension of the LACC learning community concept builds on the strength of classrooms. Teachers will mediate such contacts; classroom instructors will guide students and provide them with the discipline-specific contextual knowledge they will need as they venture into worlds that would normally lie beyond their grasp.

6.5 Electronic Empowerment

Like most technological innovations, the computer is a double-edged sword. Information technology can be designed and deployed in ways that empower students or in ways that limit their possibilities and stunt their aspirations. When information processing is introduced only as a matter of accelerating mechanical processes without engaging critical thinking, personal decision-making, or creativity, it can become a deadening influence.

LACC students stand on one side of a social crossroads. Affluent students attending prestigious institutions are currently being educated to use computers to extend their control over their own lives and over the society they live in. Faculty will be doing no great service if they teach their students to see information processing only as an instrumental skill—only as a means of realizing someone else's dreams, goals, or desires. If LACC students are to be empowered by electronic technology, they must learn to use it in an instructional context that fosters serious critical inquiry, creative self-expression, and in-depth exploration of personal and social issues.

6.6 Implications

Basic computer literacy includes the ability to access information from a variety of sources, including information online, the ability to use this information for serious academic and vocational purposes, and critical awareness of the limitations and the social, personal, and political implications of information processing technologies.

To become an "electronic oasis," LACC needs to deploy information technology in a way that maximizes access for all members of the campus community and makes it a central and highly visible part of campus life. In addition, information processing facilities need to be designed and maintained as part of an attractive overall physical environment that welcomes students and encourages their interest and participation.

Since the primary function of information technology is to enhance LACC as a learning community, instructional applications of computing should grow directly out of classroom curricula and complement—not simply supplement—classroom activities. The college and faculty together must take concrete steps to promote the integration of information technology across the curriculum. As an institution, the college will have to reassess past models of computer-aided instruction and computer deployment on campus and entertain innovative approaches to these issues.

Whenever possible, discipline faculty, qualified staff members, and/or student peer tutors with background content knowledge should guide students in their exploration of information processing technology.

In the effort to expand instructional computing, the college should use its resources to increase technical support staff and to enhance the faculty's ability to integrate new information technologies with essential content area skills and knowledge.

Chapter

7

Financing Technology

Budget[12]

7.1 Background

Until the development of a strategic plan, past practice has been to fund computers in three areas: Administrative Computing, Academic Computing, and Physical Plant. That is, each area has its own budget activity in the Operational Plan; each deals separately with the budget process; and each manages its affairs individually. Additionally, money in the form of a grant, special program, or District project has been made available sporadically for academic or administrative computing equipment. This process has been satisfactory under the circumstances and with the limited resources allocated for technology needs. However, the lack of coordination has created an uneven distribution of resources and an inability to identify or monitor inventory; to provide uniform maintenance; and to provide other disciplines access to the three existing centers. From this point forward, the college must make a significant financial commitment to information technology in order improve services to faculty, students, staff, in the area of information technology.

7.2 The Role of the InfoTech Committee

The InfoTech Committee has no budget or oversight control over specific funds *per se*. However, the committee is an advocate and an approval committee for issues involving information technology on campus. Funding is an integral part of the success of the strategic plan for maintaining or expanding information technology resources at LACC. The InfoTech coordinates its role with the Shared Governance Council and the Ed. Planning Committee.

In order to coordinate technology expenditures and implement this strategic plan most effectively, the committee is a key part of the budget review process, especially when Program 100 funds are involved. Before equipment is approved for purchase, other issues involving planning for installation include site preparation (*i.e.*, power, network hookup), maintenance, and supplies.

The InfoTech Committee is also the clearing house for computer purchases and has the responsibility to ask questions, make recommendations, and approve purchases before funds are encumbered. The committee raises issues and offers recommendations involving the following items:

What will the equipment be used for?

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[12] This chapter is a general description of major areas that need review and approval by the Budget Committee, the Shared Governance Council, and the college President.

How will the equipment be installed and maintained?

How will students directly benefit from the equipment?

Are there any major objections to the purchase from the technical experts?

Is the long term maintenance of the equipment realistic, according to Physical Plant?

The InfoTech Committee also provides support regarding purchasing procedures.

7.3 Current Funding Sources

Program 100		$529,262
$209,262	Academic Computing	
$227,000	Administrative Computing	
$ 93,000	Other	
State Instructional Equipment Funds		$1,015,000
$851,000	one-time block grant	
$164,000	on-going grant	
CCC Telecommunications Technology Infrastructure Allocation		$54,500
$ 25,000	video conferencing equipment	
$ 7500	digital satellite downlink	
$ 22,000	T1 line[13]	
Other Funding Sources		variable
	Specially Funded Programs	
	Grants	
	Donations	
	LACC Foundation	

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[13] Currently, the college has a 56,000 bps line connecting to CSUnet. This is the slowest and least expensive available. The CCC State Telecommunications Technology Infrastructure allocation is providing $22,000 to each community college to acquire a T1 line. The connection to CSUnet is part of the C3Net initiative, under which CSUnet will be expanded to serve all community colleges in the state. At 1.544 mbps—about 27 times faster than what the college is now using—the T1 line is the standard method of distribution and will allow the college to function at an appropriate level. The materials required to hook up are already in place. (See C.1 "Telecommunications Expenditure Plan" in Appendix C.)

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7.4 Recurring Annual Expenditures[14]

Annual Costs **$525,611**

Academic Computing ***$209,361***

$ 6,500	CSUnet
$ 73,448	IBM Service Contract[15]
$126,349	Salaries
$ 3,064	Other

Administrative Computing ***$223,250***

$ 3,250	Site licenses
$ 6,000	Operating/District Hookups
$124,000	Salaries
$ 90,000	Modem/Telephone Service [$2500 per month][16]

Other ***$ 93,000***

$ 83,000	Lease Payment (Computers–Business Administration Dept.)
$ 10,000	Security[17]

7.5 Projected Expenditures

Annual Costs **$1,304,500**

Staffing ***$ 310,000***

Software Staffing Support

$120,000	2 Microcomputer System Specialists
$ 25,000	0.5 Programmer Analyst

Hardware Staffing Support

$165,000	3 support staff (computer techs)

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[14] These costs are already budgeted for within the college budget.
[15] This cost will be eliminated July 1, 1997.
[16] This cost will be eliminated with the completion of the fiber optic cabling and hook-up of departments.
[17] This cost will increase with the addition of computer labs.

Equipment and Supplies		***$875,000***
$ 750,000	4-year turnover of computers [250/1000 at $3000 per yr.]	
$ 50,000	Software Upgrades	
Site Licenses—		
$ 25,000	Expanding and updating	
$ 50,000	New licenses	
Maintenance and Service		***$119,500***
$100,000	Extended warranties/in-house service	
$ 19,500	T1 line charges[18]	

One-Time Expenditures[19]		**$200,000**
$125,000	Campus-wide Fiber Optic Cabling[20]	
$ 75,000	Hook-ups to all college buildings	

7.6 Funding

Recurring expenditures are already part of the college's annual budget. Projected annual expenditures of staffing, equipment and supplies, and maintenance and service are currently *not* funded. The approximate *additional* amount necessary to fund the unfunded projected expenditures for information technology resources for each of the next four years is $1.3 million.

To the extent that this amount is available from sources other than Program 100, the college budget will not be impacted.[21] The gap between what is funded through other sources and what is recommended as necessary to accomplish this plan's objectives should be met by Program 100. Consequently, the college's Operational Plan (based on $22 million) should include 5% of the planning budget as a line item for technology expenditures and be funded annually.

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[18] Annual service charge provides unlimited access to internet and e-mail for all faculty, staff, and students.

[19] Funded through 1996/97 State Instructional Equipment Funds.

[20] See A.2 and A.3 cabling diagrams in Appendix A.

[21] To the extent that the 1996/97 SIEF totaled $1,015,000, Program 100 would have had to provide only $289,500 or 1.3% of a $22 million college budget to meet the recommended amount.

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Chapter

8

Information Technology Guidelines

Policies and Procedures

8.1 Background

Because important issues that required action or decisions arose during the formative stages of the strategic planning document, it became necessary and appropriate to develop policies and procedures to address them. Some of these policies were submitted as drafts to the SGC and received approval before being implemented. Others were developed during the planning process. The intention was to set in place guidelines that would avoid expediency, pressure, and undue subjectivity. It should be understood that policies will be altered as future circumstances warrant.

8.2 Computer and Public Network Use

LACC owns and operates a variety of computing systems that benefit its students, faculty, and staff in support of college programs and services. These systems are to be used for education, research, academic development, and public service only. Commercial uses are specifically excluded. Each person who accesses any of LACCs systems agrees to abide by the rules and prohibitions that define acceptable use. Unacceptable use is prohibited and is grounds for loss of computing privileges, as well as discipline or legal sanctions under Federal, State, and local laws. (See A.11 "Computer and Public Network Use Policy" in *Appendix A*.)

8.3 Educational Multimedia Guidelines

A group of more than 100 publishing, library, and academic organizations under the auspices of the Consortium of College and University Media Centers recently adopted guidelines. (See A.12 "Fair Use Guidelines for Educational Materials" in *Appendix A*.) They are intended to provide guidance on how to use copyrighted materials under United States copyright laws (17 U.S.C. Section 101 *et seq.*) in an era when technological advances have made it relatively easy to reproduce copyrighted materials.

Although the guidelines do not have the weight of law, they have been endorsed by the United States Copyrights Office, the United States National Endowment for the Arts, and many other institutions, organizations, and publishers nationwide. Consequently, there is a likelihood that courts may look to these guidelines when considering copyright infringement cases. In addition, the intention of this section is to underscore the importance of acquiring and using correctly the site licenses that the college must purchase to accompany much of the software.

8.4 E-Mail Etiquette and Confidentiality

8.4.1 Assumptions

A uniform format that includes e-mail addresses will simplify and thereby improve communication.

To maintain confidentiality and respect an individual's right to privacy, an e-mail address should be given out only with the individual's permission.

8.4.2 Domain Address Formats

In order to use e-mail effectively, the address format must be exact. Since various e-mail software is used, in the absence of a standard format, it is necessary to provide that information to individuals. Examples of addressing variations are indicated below.

- Academic computing network on the CITYnet system:

lastname@citymail.lacc.cc.ca.us

- Administrative computing network on the District system:

loginname@laccd.edu or loginname@laccd.cc.ca.us

A campus directory, updated annually, should supersede currently used documents and include the following elements formatted in an easily accessible manner.

Name ________________________	Position Title________________________
Campus Telephone Extension _____	Building and Room Number ___________
E-Mail Address__________________	College-Level Committee Affiliation(s) ___

8.4.3 Permission to Publish E-Mail Address

Individuals may be networked on one of two different systems of e-mail on campus. Those connected via the District network can communicate with others who are connected. However, until the fiber-optic cable is installed, individuals using alternative connections are not on a campus-provided service. Although they may want or need to contact others who are on either of the campus systems, they may also want to retain some control over their e-mail address.

8.4.4 Confidentiality of Messages

In the absence of District guidelines that specifically address e-mail messages, it is recommended that there be a clear understanding about how an e-mail message is used by any recipient. One issue is whether an e-mail message is to be considered a "written" communication or something other than written. Another issue is that there is a difference between formal and informal/casual communication. To avoid the possibility of serious problems being created, the following standards should be used until official guidelines are established.

1) A casual, off-the-record communication shall be kept off the record.

2) A formal communication for public information and broadcast shall be confirmed to be that type of communication *before* it is made public.

3) The express consent of the sender shall be the measure by which confirmation for publication is determined.

8.4.5 Faculty Access to Student Records

It is essential to maintain confidentiality of student records as an information technology plan is institutionalized. While the Admissions and Records policy of requiring written requests for access to students' records remains in effect and until such time as the Board of Trustees adopts a different policy, requests can be automated in the following way:

> Faculty who are online for e-mail through Academic Computing can send an e-mail to the Associate Dean, Assistant Registrar, or Admissions and Records Supervisors requesting students' records. The e-mail message should include the student's Social Security Number, the specific information requested, and the specific reason the information is requested.[22]

8.4.6 Etiquette

To limit excessive e-mail notices being posted to a mailbox, the following considerations are expected.

> Forwarding chain letters, personal well wishes, thanks, or congratulations to "All CityMail Users" is inappropriate.
>
> Responding *only* to the original addressee rather than to *all* addressees (unless specifically requested to do so) is strongly encouraged.

8.5 Formal Requests for Allocation of Resources

8.5.1 Assumptions

When funds are identified—whether by the state, district, or college—for the purchase of equipment and supplies, the information will be disseminated to the appropriate constituencies.

1. If the funds are earmarked for instructional uses only, representative from the Educational Planning Committee will participate with representatives from the InfoTech Committee as the Joint Allocation Committee in developing recommendations for

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[22] Submitted by the LACC Student Services Council, December 1996.

allocation. In such cases, the EPC has developed an Instructional Equipment Allocation Process and format to receive these requests. The process and steps vary from those listed below in that they are focused specifically on instructional needs and work through the Department Chairs Council and the Academic Senate.

2. If the funds are for general college use, the InfoTech Committee will develop recommendations for allocation of that portion of the funds within the guidelines developed by the SGC and the Institutional Planning Committee and will follow the process, steps, and priorities described in 8.5.3, 8.5.4, and 8.5.5.

3. If the purchase of equipment would impact physical facilities in any way, recommendations will be reviewed by the Facilities Planning Committee and Work Environment Committee with concerns and issues sent to their attention.

8.5.2 Policy

- To provide for balanced growth of information technology resources on campus

- To follow an established process for allocating funding earmarked for instructional information technology, whether one-time or on-going

- To use predictable and reasonable criteria when recommending priorities for projects to be funded

- To accept on uniform forms tailored for proposal submission and evaluation college-wide requests for technology funding

8.5.3 Process

The InfoTech Committee shall establish a Project Screening Subcommittee to receive completed requests for funding. (See D.6 "Proposal Tracking Form" in *Appendix D.*) The committee shall be balanced in composition among the academic/vocational disciplines and instructional/student support services but should also be small enough to function effectively. Six voting members—three faculty from varied disciplines, one support services representative, one administrator, and one ASO representative—are charged to maintain impartiality, avoid proprietary interests, and strive for a balanced allocation of funds, in accordance with the priorities stated in 8.5.5.

8.5.4 Procedure for Screening Proposals

1) The Project Screening Subcommittee shall receive completed proposals during an "open season" once a semester when the budget available for such projects has been finalized.

2) Each subcommittee member shall screen each of the proposals individually and rank the project according to the InfoTech Committee's order of priorities. Each member will assign an overall merit score to each proposal, ranging from 0 (no merit) to 10 (highest merit). Any proposal ranked below 7 should include a brief explanation of the faults and merits of the project appended for later review by the submitter.

3) Programs and departments submitting projects ranked 7 or higher will undergo an inventory audit to determine the number, condition, and currency of existing equipment.

4) The subcommittee will then convene and review jointly any proposal with a ranking of 7 or higher by at least 4 of the 6 members. The unqualified proposals shall be returned to the submitter.

5) Qualified proposals shall be viewed as a pool of projects of equal merit but subject to funding limitations and a need for balance within the entire institution.

6) The Project Screening Subcommittee will recommend a mix of proposals for funding for the period that reflect the impact and balance on instruction of the chosen projects. The recommendations will be forwarded to the InfoTech Committee for further review and discussion until they are approved by consensus. The process will continue as outlined in the flow chart. (See A.10 in *Appendix A*.)

8.5.5 Priorities for Screening Proposals

- Are there any constraints or restrictions placed on the use of the available funds (*i.e.*, SIEF, donations)? If a request/proposal does not meet the funds' restrictions, it must be disqualified.
- Are there other sources of funding for which this request/proposal qualifies (*i.e.*, VATEA, Title III, Upward Bound)? If so, the request/proposal may be referred to those other sources by the committee.
- To what extent and in what ways does this request/proposal meet the mission and educational goals of the college?
- Is this request essential for the continuation/accreditation of a program or for its continued relevancy in modern educational and work environments?
- Can the facilities/equipment/technology in this proposed request be shared by several departments or areas or better provided in an all-college facility? (Shared facilities are viewed as a more efficient use of funds than single-purpose requests.)
- How will this request affect the infrastructure of the institution? Will new space or facilities be needed, and are they available? (Given limited resources and funding for building renovation, a request requiring substantial rebuilding must have exceptional merit.)
- What additional costs are attached to this request (*i.e.*, networking/cabling; distribution of power, air-conditioning, security, phone lines; software and site licenses; furniture; adaptive costs; maintenance contracts and extended warranties; additional staffing)?
- What is the number of students served by the request? What is the WSCH generated or likely to be generated/increased?
- Does this request replace existing equipment that can be recycled for another use?
- Is leasing the equipment, as opposed to purchasing it, an option?
- What are the projected ongoing costs? What is the source of their funding?

8.6 Shared InfoTech Resources[23]

8.6.1 Assumptions

This policy is meant as a temporary measure to address the urgent need by under-equipped departments to have access to current technology for their students. The policy directly addresses Strategic Principle #1 and #3[24] in *LACCs Strategic Plan for Information Technology* by providing the broadest and most inclusive access possible to "all those who deserve and can benefit from the resources and technology."

Recommendations regarding the sharing of technology resources come under the jurisdiction of the InfoTech Committee. It is within the purview of this committee to mediate an agreement or act as a third party when two departments cannot come to agreement by themselves. Final determination about sharing information technology resources rests with the President.

Principles of fairness, flexibility, and reasonableness underlie this policy. It is the intent of the InfoTech Committee to facilitate the sharing of resources when feasible since situations are fluid and idiosyncratic, involving issues of security, maintenance, supervision, and instructional use.

In order to prevent a temporary policy from becoming permanent by default, this policy will be reviewed and updated or modified on a regular basis and agreements between departments will include an expiration date.

8.6.2 Policy

The InfoTech Committee, in an effort to establish an arena where technology resources can be shared with under-equipped departments for the students' instructional benefit, encourages departments to develop individual solutions to support their technology needs. (See A.9 "LACC Models of Shared Resources" in *Appendix A*.)

8.6.3 Process

A requesting department should first approach a providing department to ask that a sharing of resources agreement be developed. If such an arrangement appears possible, the requesting department obtains an agreement form from the InfoTech Committee chair or designee. (See D.5 "Shared InfoTech Resources Agreement" in *Appendix D*.) Both departments complete and sign the binding agreement to formalize an existing agreement or a proposed arrangement agreeable to both parties, including an expiration date. This action will be shared with the SGC as an information item and include the details of the agreement. Copies of the agreement will be on file in both departments and with the Office of Academic Affairs, the SGC, and the InfoTech Committee.

If a requesting department has made a reasonable but unsuccessful effort to develop an arrangement with another department, the InfoTech Committee will act, on request, as a negotiating body to mediate an agreement. The committee will not attempt to develop solutions without first involving the potential providing department(s).

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[23] Approved by Department Chairs Council 9/10/96. Approved by SGC 9/23/96.

[24] See Chapter 2, Section 2.6.

8.6.4 Procedure for Filing a Shared Resource Request

The following steps provide a clear, orderly process for filing a request.

1) To initiate the process, the requesting department asks for an agreement form from the InfoTech Committee. A serious instructional need for access to resources must be identified along with an indication that the resources are not currently available within the department's own resources. Included in the request are the reason, nature of the resource(s) needed, time requirements (anticipated length of need and instructional time), number of users, staffing requirements, and other information necessary for the committee to develop a recommendation to support the request.

2) The chair of the InfoTech Committee notifies the appropriate department chairperson whose resources might be shared and informs him/her of the request.

3) If no agreement can be reached despite reasonable efforts, and the request is urgent and serious enough to impact the instructional program negatively and with only limited possibility for satisfactory resolution in a timely manner, the InfoTech Committee may make a recommendation in favor of the requesting department. This recommendation will be forwarded to the SGC for support or rejection. If the InfoTech Committee recommendation is supported by the SGC and the department chairperson required to share the resources disagrees, that chair may file an appeal and present it to the SGC for reconsideration.

4) The SGC will hear the appeal. If the InfoTech Committee recommendation is rejected by the SGC, the matter is resolved. If the SGC supports the InfoTech Committee recommendation, it will forward that recommendation to the President for action. The President's action will be final.

8.7 Equipment Disposal and Recycling

8.7.1 Assumptions

Disposal: When computer equipment becomes technologically obsolete, it should be disposed of in accordance with Board rules for the disposal of such items.

Recycling: When computer equipment becomes available as the result of the purchase/acquisition of new equipment, the older items should be recycled in an equitable manner.

8.7.2 Policy

Disposal: Requests for the disposal, salvage, and/or donation of *economically non-repairable equipment* will be the initial responsibility of the Physical Plant in cooperation with the InfoTech Committee.

Recycling Recommendations regarding *recyclable equipment* shall be made based on demonstrated need and in coordination with the stated goals of the Strategic Plan.

8.7.3 Process

Disposal: Physical Plant will receive the initial request and process the formal district documents necessary in order to reclassify the equipment. A copy of the documents will be forwarded to the InfoTech Committee for information. The committee will note the request especially with regard to the *number, type,* and *inventory of equipment*, and *the procedure* for removing and discarding it.

Recycling: The availability of any computer parts for recycling will be announced college-wide, with suitable time identified for a response. Such equipment shall be made available to all interested departments, areas, or programs to the extent possible and not limited by outside restrictions (*i.e.*, VATEA, GAIN, etc.). Responses of interest resulting from the announcement shall be filed on a special form by the due date and include the level of the request, the item(s) requested, the use to which the equipment will be put, and any additional appropriate information. (See D.3 "Request for Recycled Computers" in *Appendix D.*) Responses of interest thus gathered will be forwarded to the InfoTech Committee for its review, prioritization.

8.8 Theft or Abuse of Computer Resources[25]

As a result of extensive review of the student discipline procedures and assessment of contemporary issues (*i.e.*, theft or abuse of computer resources) affecting conduct on college campuses, a new Board Rule (9803.26) was recommended and adopted in order to equitably apply standards when instances of such behavior occur. It is used here to apply to all students, faculty, staff, and administrators.

THEFT OR ABUSE OF COMPUTER RESOURCES. Theft or abuse of computer resources including but not limited to:

a) Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.

b) Unauthorized transfer of a file.

c) Unauthorized use of another individual's identification and password.

d) Use of computing facilities to interfere with the work of a student, faculty member of college official, or to alter college or district records.

e) Use of unlicensed software.

f) Unauthorized copying of software.

g) Use of computing facilities to access, send or engage in messages which are obscene, threatening, defamatory, present a clear and present danger, violate a lawful regulation and/or substantially disrupt the orderly operation of a college campus.

h) Use of computing facilities to interfere with the regular operation of the college or district computing system.

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[25] Approved by LACCD Board of Trustees 9/96.

8.9 Disbursement of Recovered Computer Parts[26]

8.9.1 Assumption

When lost or stolen computer parts are recovered, they should be disbursed in an equitable manner.

8.9.2 Policy

Recommendations regarding recovered parts shall be made based on stated need, on applicability to need, and with regard to the original funding source from which the recovered parts were funded.

8.9.3 Process

1) Any recovered computer parts will first be offered to the departments, areas, or programs that experienced the initial loss.

2) If the departments, areas, or programs experiencing a loss no longer need the parts, then the parts shall be made available to other interested departments, areas, or programs.

    - A college-wide announcement of the availability of the parts will be made, with suitable time identified for a response.
    - Responses of interest resulting from the announcement shall consist of a statement of need and purpose as to how the requesting department, area, or program will put the parts to use.

3) Responses of interest thus gathered will be forwarded to the InfoTech Committee for its review, prioritization, and recommendations.

4) Recommendations will be forwarded to the SGC for its consideration.

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[26] Approved by SGC May 1996

Chapter

9

Plan of Action

InfoTech Recommendations[27]

9.1 Immediate Recommendations

1) With the installation of the fiber optic backbone for the entire campus, all departments accessing Internet will go directly through the college T1 line to CSUnet, and access by modem will be eliminated. [3]

2) Hardware purchases for computer systems will be from a standard manufacturer with configuration specifications varying, depending on application and need. Acquisitions will be approved by the InfoTech Committee and monitored by the administrator responsible for equipment purchases. Exceptions from the standard will require separate review and approval. [3]

3) During the college's transition into an "electronic campus," on-site service contracts carrying a one to two year warranty will be specified in purchase orders until sufficient technical staff are available to maintain the equipment adequately. [3]

4) Academic and/or administrative computing will maintain an inventory of operating systems and application software packages in use in both classrooms and offices. The activity will produce a cost estimate and a plan to bring all the software in use on the campus under proper applicable site licensing. [3]

5) Six computers to the standard (see item #2) and within the budget are recommended for purchase and use in the Martin Luther King, Jr. Library. [3]

6) The faculty and college support additional staff development activities addressing instructional applications of information processing technology. [5]

7) The Title III mini-grant program may provide funds while available to faculty and staff for the development of projects that address campus-wide, technology-related needs. [5]

8) A closer liaison between the Teaching-Learning Center (TLC) and Instructional Multi-Media Center should be developed in order to coordinate and support faculty needs. [5]

9) Support staff should be available in the TLC to accommodate faculty in the evenings and on Saturdays. [5]

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10) The faculty should consider including an addendum to the Course Outline of Record detailing the role of information processing for all classes. [6]

11) Funding for information technology—staff, equipment, supplies—should be a line item in Program 100. [7]

9.2 Midterm Recommendations

1) Since the Library is the college's primary site for technology resources, its needs must receive priority in order to be fully networked as soon as possible. [3]

2) Alternatives to traditional keys—keyless entry, credit-card reading locks, and other types of key and locking systems—should be investigated to improve the effectiveness of an electronic security system. [3]

3) Sufficient support staff are essential to provide for the repair, servicing, instructional support, and administrative coordination necessary to maintain the integrity of the computing system. Necessary staff include the following: two microcomputer systems specialists, a computer technician, an electronics technician, an instructional technology assistant, a programmer, a network operator/manager, and an office assistant. The current office assistant position should be reclassified to automated systems assistant. [4]

4) Staff Development should work with departments in the appropriate disciplines to create a one- or two-semester internship program for students in software technology and computer hardware. Interns may be used to provide support in the Teaching-Learning Center and other areas. [5]

5) Staff Development will develop a list of technology mentors who have special skills to assist faculty. Faculty mentors may receive Flex credit. [5]

6) Software purchases relating to instruction should include applications that encourage active, creative, and critical engagement with classroom content; applications offering self-contained instructional programs or packages of mechanical "skill drills" that require little or no direct contact with faculty should receive reduced priority. [6]

9.3 On-Going Recommendations

1) A four-year policy of hardware replacement/upgrading will be instituted in order to recycle equipment and keep repair costs to a minimum. [3]

2) Before a department or area is approved to order new or recycled hardware, Academic Computing, Administrative Computing, or Physical Plant (whichever is appropriate) will conduct an audit of existing equipment in order to develop and maintain an accurate inventory. [3]

3) Security equipment must be included in the purchase and installation of any new computer facilities and at the time of upgrade of existing ones. [3]

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[27] *Editor's Note:* All recommendations developed from this planning document are included in Chapter 9 for easier access, active application, and regular review. The chapters from which they emerged are noted in brackets.

4) Once a semester, a status report of services and projects will be submitted by Academic computing, Administrative Computing, and Physical Plant to the InfoTech Committee for review. [4]

5) In order to maintain a close connection to the college's ongoing planning process for information technology, permanent members of the InfoTech Committee should include, among others, the following: Vice President of Academic Affairs, Director of Academic Computing, and a representative from the Library, Administrative Computing, Physical Plant, and Instructional Multi-Media Center. [5]

6) Each academic discipline/department should establish a standing faculty committee to explore innovations in curriculum and delivery of instructional resources that take advantage of information technology. [6]

7) Adequate funding for information technology is essential and should be identified as part of the college's on-going budget. In addition to the current expenditures, it is strongly recommended that a base amount equal to 6% of Program 100 funds be budgeted for *all aspects* of information technology. To the extent that State Instructional Equipment Funds are credited to that amount, the percentage from Program 100 can be reduced. [7]

8) Information Technology policies and procedures should be reviewed on an annual basis in order for them to remain current, usable, and appropriate. [8]

9) As new issues arise, new policies and/or procedures will be needed. Guidelines should be drafted by the InfoTech Committee, either on their own initiative or at the request of the Shared Governance Council. The drafted policy and/or procedure should be reviewed by the SGC before it is implemented. If approved, it should be appended to this Strategic Plan and communicated to the college community. [8]

- It is a strong recommendation of the InfoTech Committee that a Classified Staffing Prioritization Committee be established (similar in function and process to the Faculty Prioritization Committee) in order to identify where new positions should be funded/filled. The purpose of this committee would be to coordinate the college's staffing needs and use the college's resources as effectively as possible.

Appendix

A. Documents

A.1 Current District Projects—Office of Information Technology

A.2 LACC Cabling Diagram I

A.3 LACC Cabling Diagram II

A.4 Current Organizational Chart for Administrative Computing

A.5 Proposed Organizational Chart for *Phase 1* Administrative Computing

A.6 Current Organizational Chart for Academic Computing

A.7 Proposed Organizational Chart for *Phase 1* Academic Computing

A.8 Proposed Organizational Chart for *Phase 2* Computing Technology

A.9 LACC Models of Shared Resources

A.10 Information Technology Decision-Making Flow Chart

A.11 LACC Computer and Public Network Use

A.12 Fair Use Guidelines for Educational Multimedia

B. Bibliography

B.1 General Information Articles

B.2 Planning Guidelines

B.3 Sample Master Plans

C. CCC Telecommunications Plan

C.1 LACC 1996-97 Plan Telecommunications Expenditure Plan

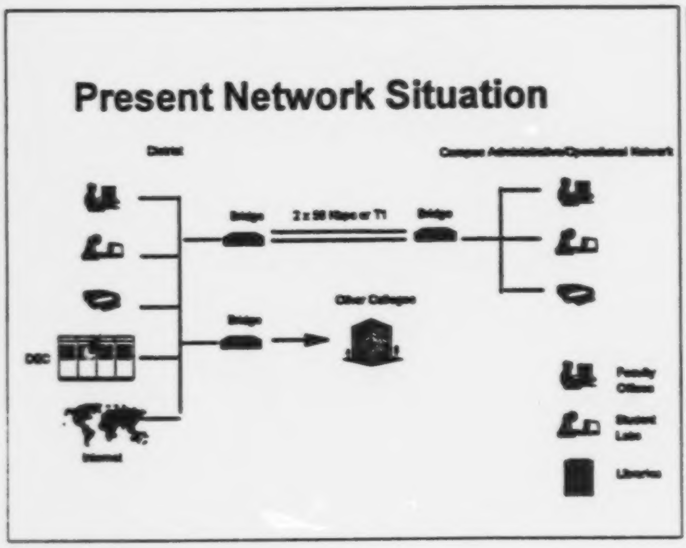
C.2 LACC Telecommunications and Technology Physical Inventory

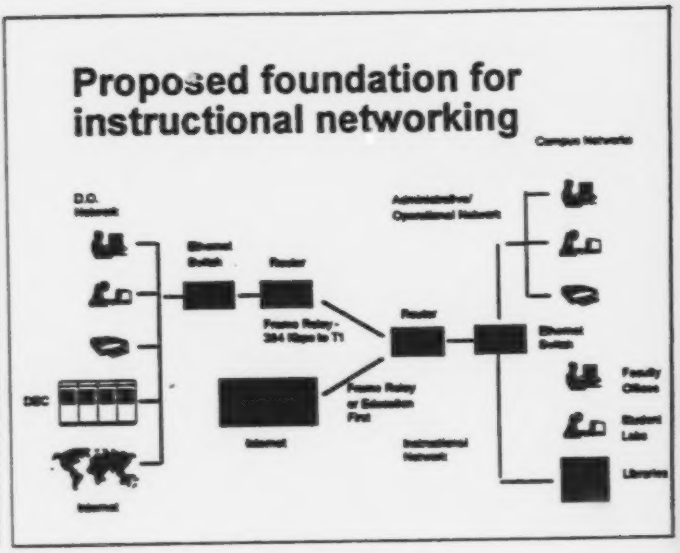
D. Forms

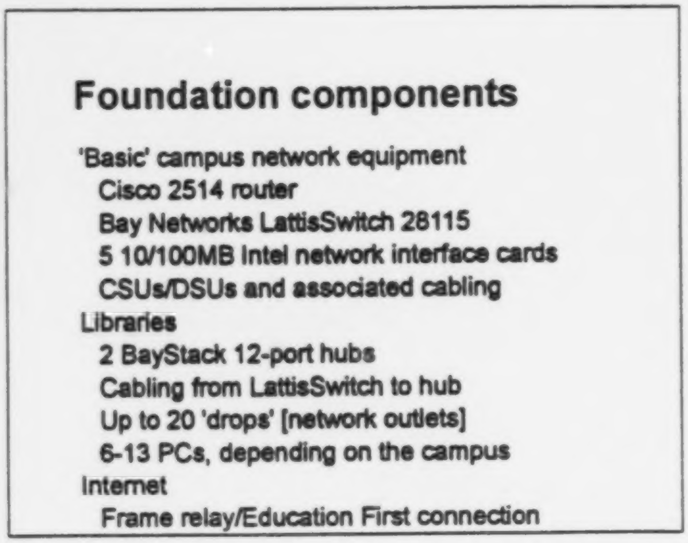
- D.1 InfoTech Instructional Computing Survey No. 1—Status of Computers
- D.2 Instructional Computing Survey No. 2—Use of Computers
- D.3 Request for Recycled Computers
- D.4 Sample—Direct Offer for Technical Support from Manufacturer
- D.5 Shared InfoTech Resources Agreement
- D.6 Request for Allocation of Resources Form
- D.7 Proposal Tracking Form
- D.8 Reviewers' Instructions
- D.9 Initial Screening Form

A. Documents

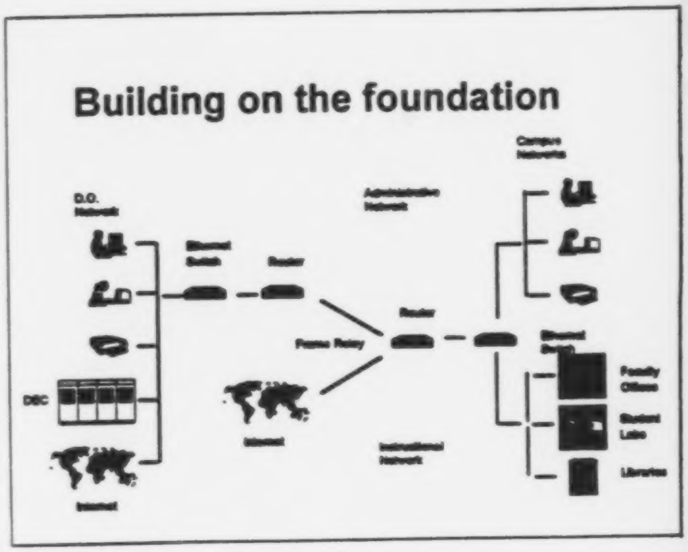
A.1 Current District Projects—Office of Information Technology


Present Network Situation
District
Campus Administrative/Operational Network
Bridge
2 x 56 Kbps or T1
Bridge
Bridge
Other Colleges
DEC
Internet
Faculty Offices
Student Labs
Libraries


Proposed foundation for instructional networking
Campus Networks
D.O. Network
Administrative/ Operational Network
Ethernet Switch
Router
Frame Relay - 384 Kbps to T1
Router
Ethernet Switch
DEC
Frame Relay or Education First
Internet
Instructional Network
Faculty Offices
Student Labs
Libraries
Internet


Foundation components

- 'Basic' campus network equipment
  - Cisco 2514 router
  - Bay Networks LattisSwitch 28115
  - 5 10/100MB Intel network interface cards
  - CSUs/DSUs and associated cabling
- Libraries
  - 2 BayStack 12-port hubs
  - Cabling from LattisSwitch to hub
  - Up to 20 'drops' [network outlets]
  - 6-13 PCs, depending on the campus
- Internet
  - Frame relay/Education First connection


Building on the foundation
Campus Networks
D.O. Network
Administrative Network
Ethernet Switch
Router
Router
Frame Relay
Ethernet Switch
DEC
Internet
Instructional Network
Faculty Offices
Student Labs
Libraries
Internet

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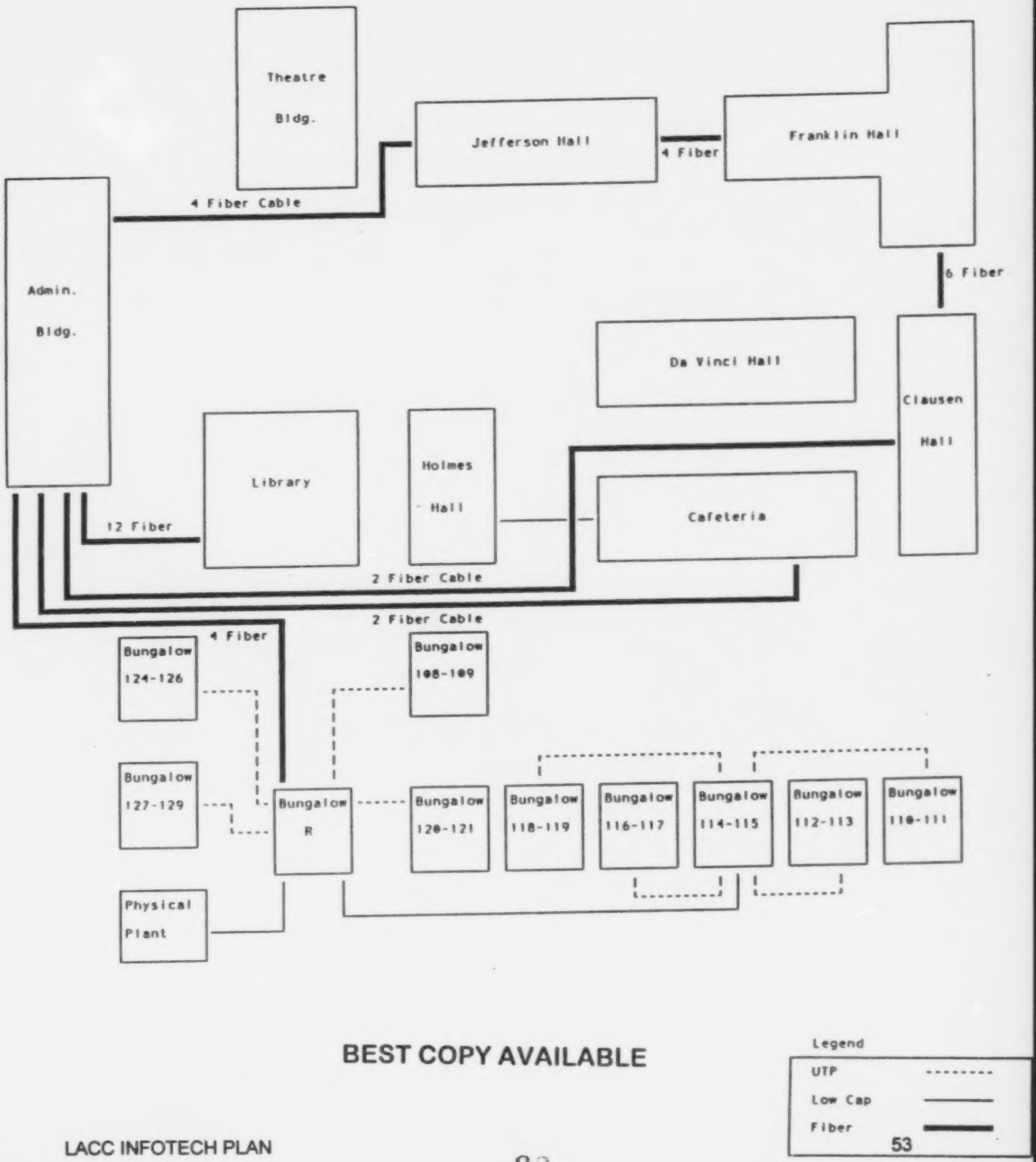
A.2 City College Cabling Diagram


Theatre Bldg.
Jefferson Hall
4 Fiber
Franklin Hall
4 Fiber Cable
Admin. Bldg.
6 Fiber
Da Vinci Hall
Clausen Hall
Library
Holmes Hall
Cafeteria
12 Fiber
2 Fiber Cable
2 Fiber Cable
4 Fiber
Bungalow 124-126
Bungalow 108-109
Bungalow 127-129
Bungalow R
Bungalow 120-121
Bungalow 118-119
Bungalow 116-117
Bungalow 114-115
Bungalow 112-113
Bungalow 110-111
Physical Plant
Legend
UTP
Low Cap
Fiber

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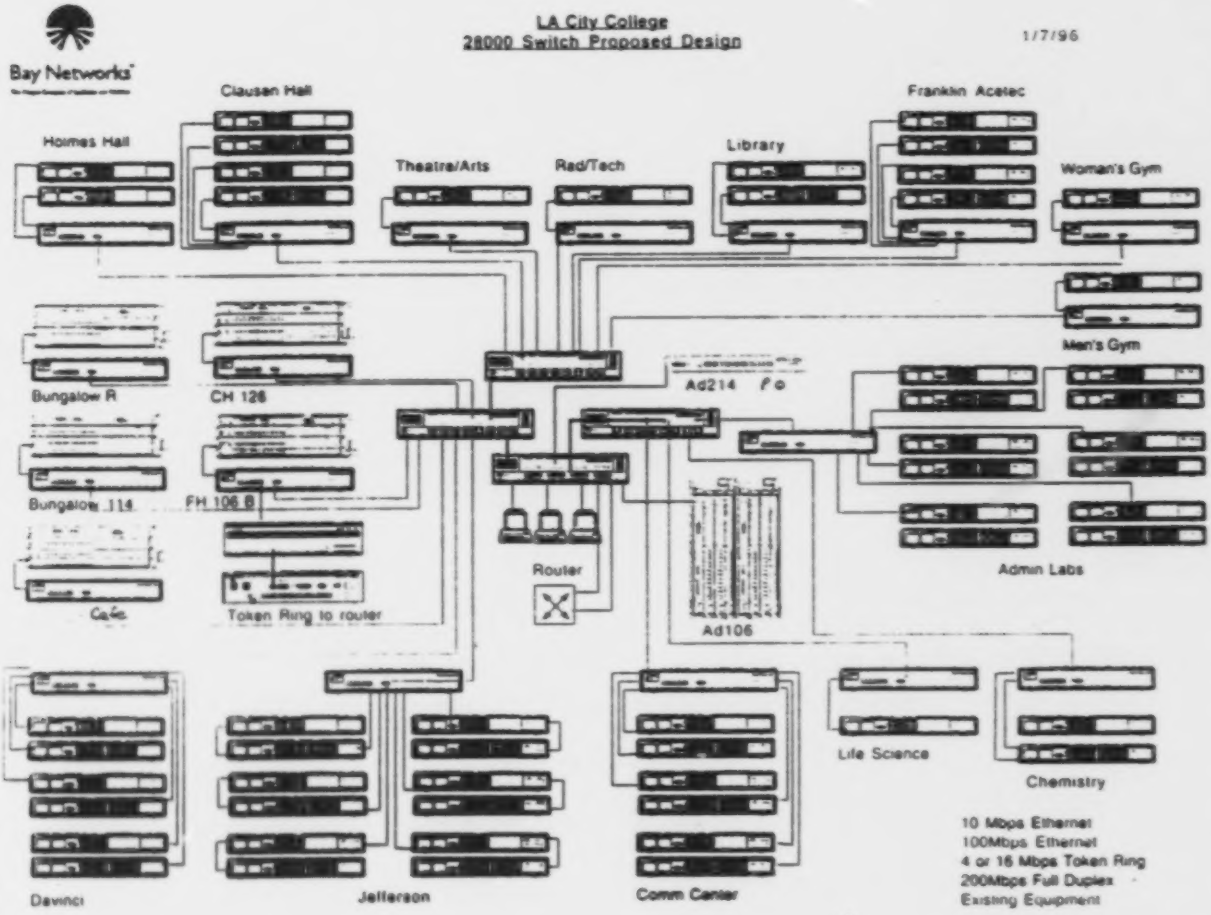
A.3 LACC Cabling Diagram II


Bay Networks
LA City College
28000 Switch Proposed Design
1/7/96
Holmes Hall
Clausen Hall
Theatre/Arts
Rad/Tech
Library
Franklin Acetec
Woman's Gym
Men's Gym
Bungalow R
CH 126
Ad214
Fo
Bungalow 114
FH 106 B
Cafe
Token Ring to router
Router
Ad106
Admin Labs
Davinci
Jefferson
Comm Center
Life Science
Chemistry
10 Mbps Ethernet
100Mbps Ethernet
4 or 16 Mbps Token Ring
200Mbps Full Duplex
Existing Equipment

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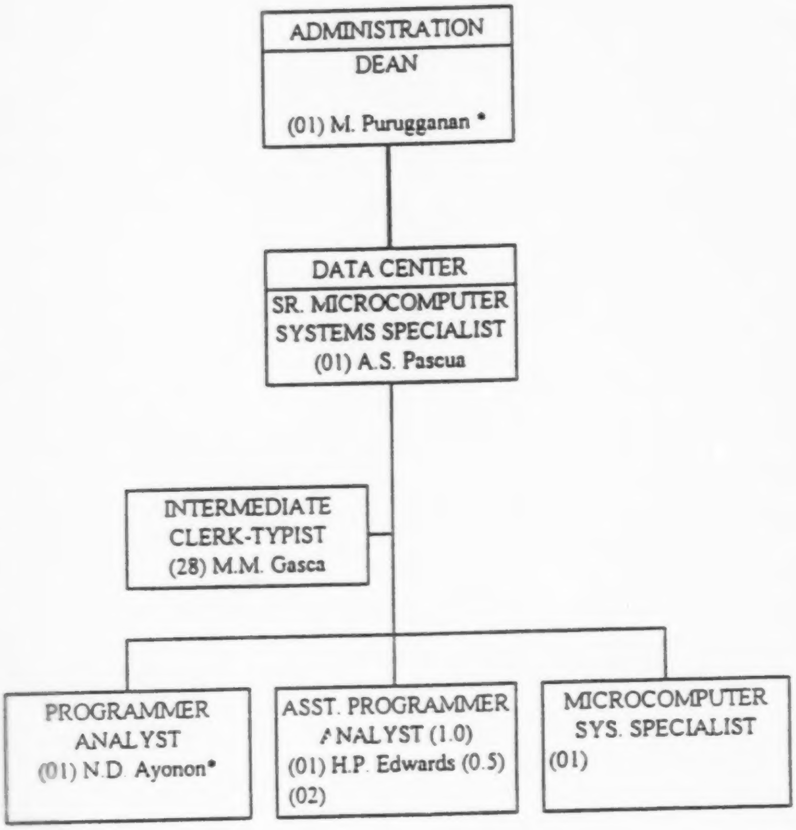
A.4 *Current* Organizational Chart for Administrative Computing


ADMINISTRATION
DEAN
(01) M. Purugganan *
DATA CENTER
SR. MICROCOMPUTER SYSTEMS SPECIALIST
(01) A.S. Pascua
INTERMEDIATE CLERK-TYPIST
(28) M.M. Gasca
PROGRAMMER ANALYST
(01) N.D. Ayonon*
ASST. PROGRAMMER ANALYST (1.0)
(01) H.P. Edwards (0.5)
(02)
MICROCOMPUTER SYS. SPECIALIST
(01)

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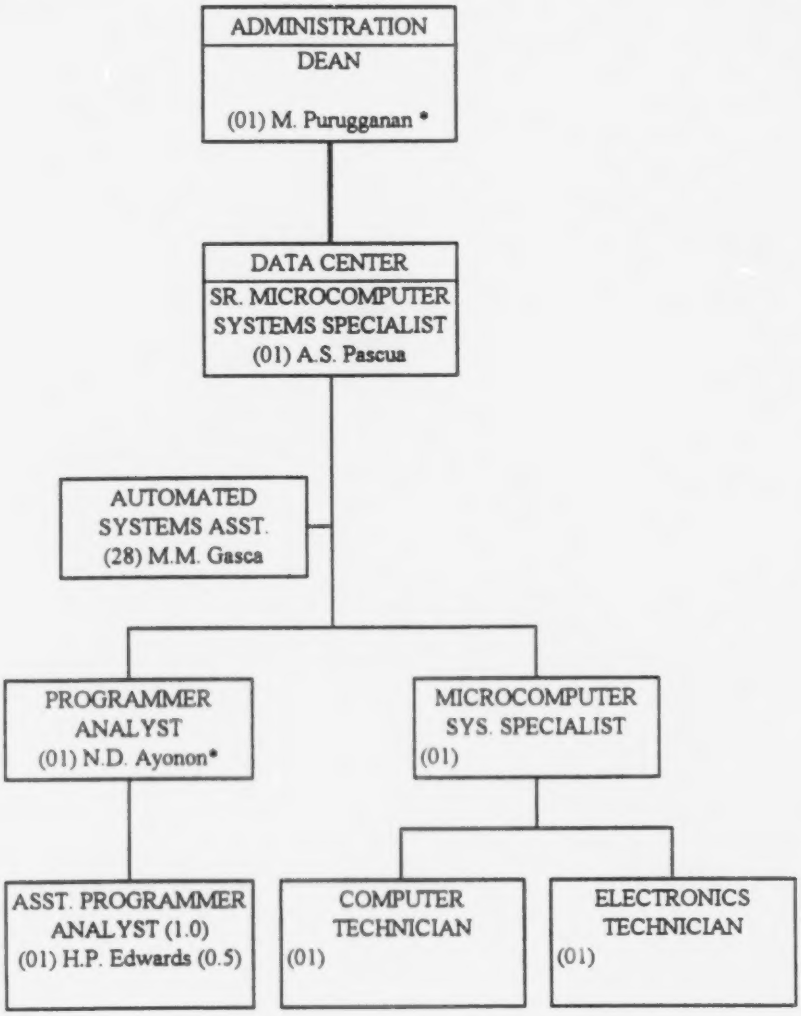
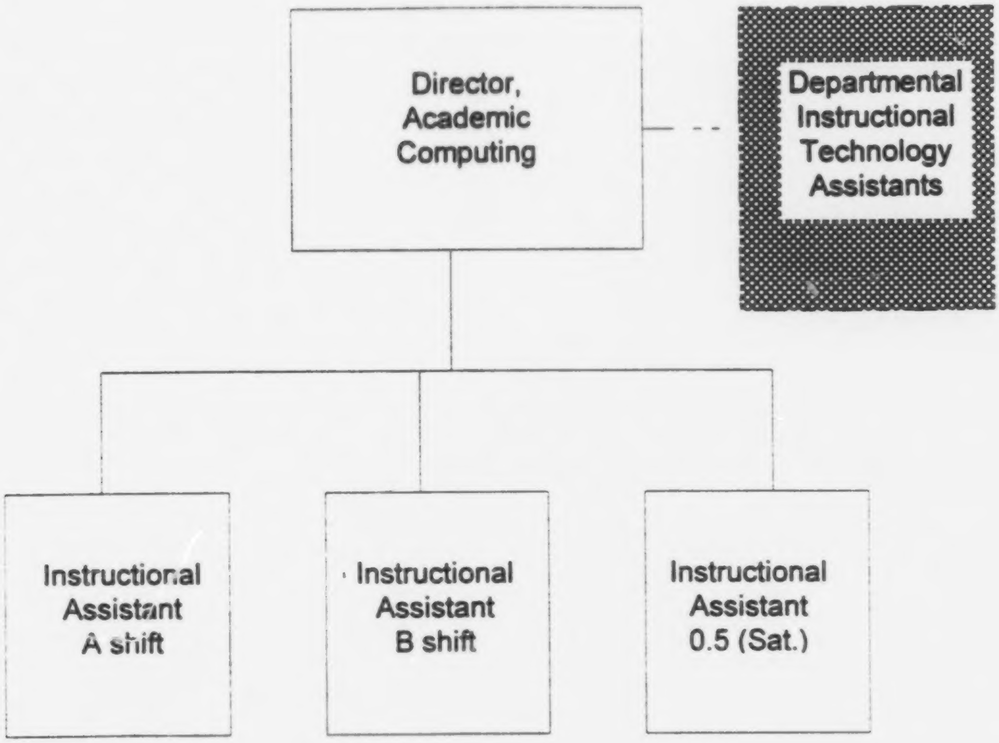
* Acting

A.5 Proposed Organizational Chart for *Phase 1* Administrative Computing


ADMINISTRATION
DEAN
(01) M. Purugganan *
DATA CENTER
SR. MICROCOMPUTER SYSTEMS SPECIALIST
(01) A.S. Pascua
AUTOMATED SYSTEMS ASST.
(28) M.M. Gasca
PROGRAMMER ANALYST
(01) N.D. Ayonon*
MICROCOMPUTER SYS. SPECIALIST
(01)
ASST. PROGRAMMER ANALYST (1.0)
(01) H.P. Edwards (0.5)
COMPUTER TECHNICIAN
(01)
ELECTRONICS TECHNICIAN
(01)

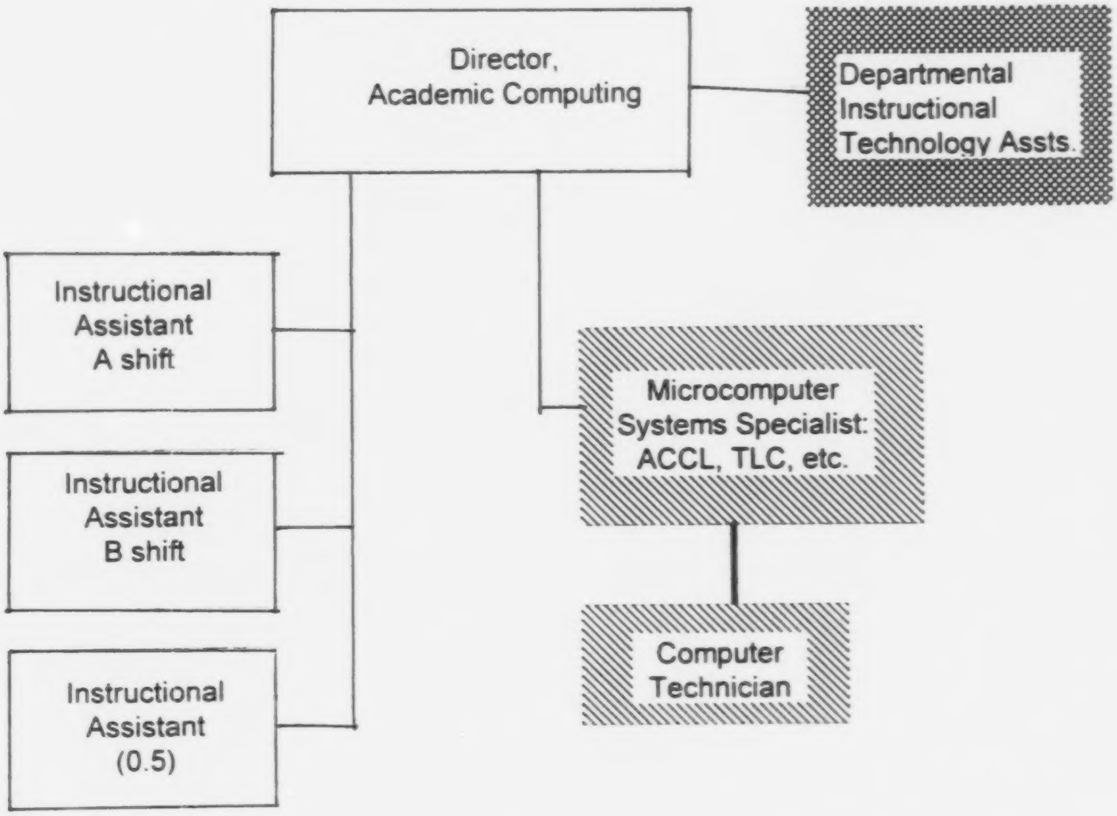
* Acting

A.6 *Current* Organizational Chart for Academic Computing


Director, Academic Computing
Departmental Instructional Technology Assistants
Instructional Assistant A shift
Instructional Assistant B shift
Instructional Assistant 0.5 (Sat.)

Cross-hatched box does not report to Director of Academic Computing but is directly involved with the instructional program.

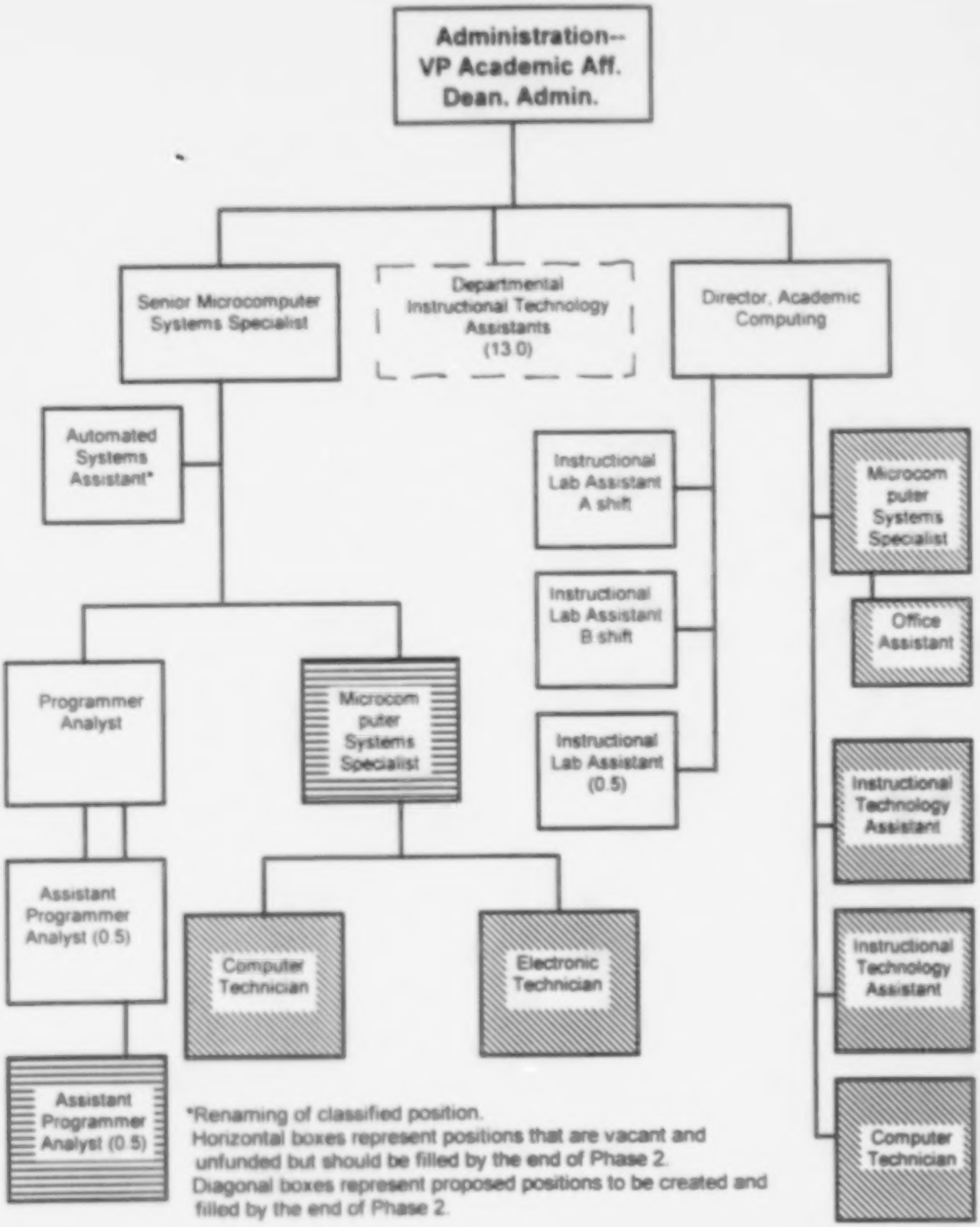
A. 7 Proposed Organizational Chart for *Phase 1* Academic Computing


Director, Academic Computing
Departmental Instructional Technology Assts.
Instructional Assistant A shift
Instructional Assistant B shift
Instructional Assistant (0.5)
Microcomputer Systems Specialist: ACCL, TLC, etc.
Computer Technician

Cross-hatched box does not report to Director of Academic Computing but is directly involved with the instructional program.

Diagonal boxes represent proposed new positions.

A.8 Proposed Organizational Chart for *Phase 2* Computing Technology



Administration-- VP Academic Aff. Dean, Admin.
Senior Microcomputer Systems Specialist
Departmental Instructional Technology Assistants (13.0)
Director, Academic Computing
Automated Systems Assistant*
Instructional Lab Assistant A shift
Instructional Lab Assistant B shift
Instructional Lab Assistant (0.5)
Microcomputer Systems Specialist
Office Assistant
Programmer Analyst
Microcomputer Systems Specialist
Instructional Technology Assistant
Assistant Programmer Analyst (0.5)
Computer Technician
Electronic Technician
Instructional Technology Assistant
Assistant Programmer Analyst (0.5)
Computer Technician

*Renaming of classified position.

Horizontal boxes represent positions that are vacant and unfunded but should be filled by the end of Phase 2.

Diagonal boxes represent proposed positions to be created and filled by the end of Phase 2.

A.9 LACC Models of Shared Resources

- The Travel and Tourism Department program included a hands-on demonstration of interaction with an airline reservations terminal. The instructor made a homework assignment to be executed at the students' leisure in the All-College Computer Lab (ACCL). When the instructor retired and the single-person department offerings were placed in the *Earth Sciences Department*, the new instructor believed that the hands-on practice should be given far more importance in the curriculum. The instructor asked to have access to machines for the entire class at a regular time each week. This requirement made the use of the ACCL impractical. The chairperson of the Earth Sciences Department eventually established a regular weekly time slot in a laboratory of the *ACETEC Department*. ACETEC gladly shared its lab with the Earth Sciences Department at a time when the facility was not otherwise scheduled. The arrangement has continued satisfactorily for the last several semesters.

  The first year of the Title III grant provided funds for equipment and training on up-to-date computer-based instruction of both basic and advanced mathematics. A 24-station facility was built for the *Mathematics Department* in JH310, complete with software, workstations, Internet access, CITYnet access, and furniture. In an unrelated development, the *Media Arts Department* was getting new course approval for "Digital Photography." The course requires the use of powerful workstations, ample time to work with digitized photographs, and network access for licensed distribution of software. The Media Arts Department chair contacted the director of the ACCL for suggestions and was referred to the new mathematics lab. The math lab was made available because the facility was to be closed for lack of support staff during the afternoons. In Fall 1996, students in the photography class with use the math lab for their course work.

- In Spring 1996 a class of physics students needed access to Interactive Physics, a software package designed as an instructional support. However, the Physics Department equipment was not yet available. The Math Department chairperson allowed the instructor access to the Math Lab so that the software could be installed on the network.

- During Summer 1996, the instructor of a Saturday session wanted to demonstrate the use of hypertext and its application to writing composition for students from the Upward Bound program. The software was installed onto the network and the instructor was able to use the facility for the single class session.

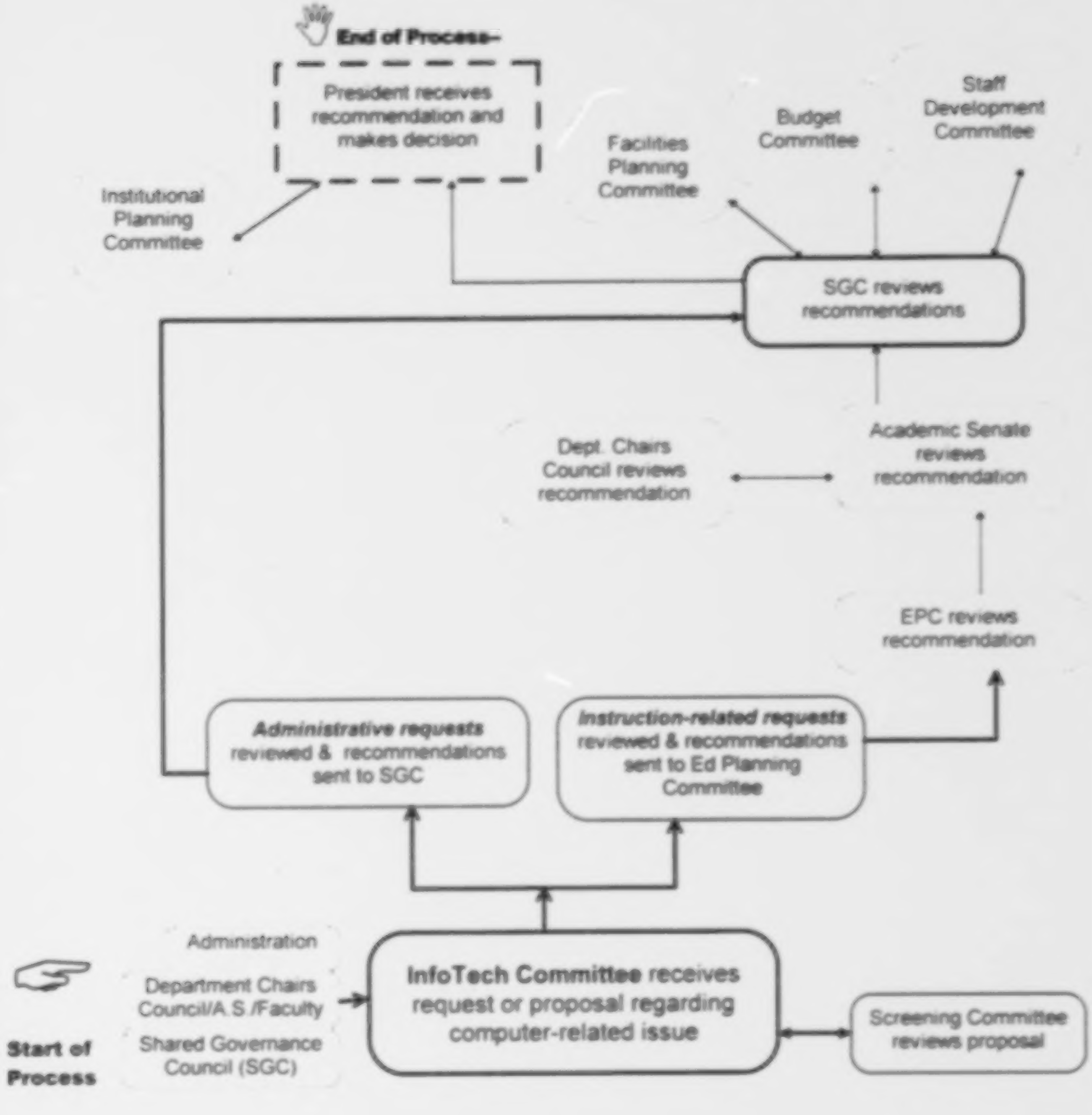
Necessary Elements for Successful Sharing of Resources

1) Reasonably easy-to-arrange accommodation of one department by a second department

2) No need to overhaul a complete schedule to fit the need with the resource

3) Natural willingness of the chairpersons/departments involved to cooperate

A.10 Information Technology Decision-Making Flow Chart


End of Process–
President receives recommendation and makes decision
Institutional Planning Committee
Facilities Planning Committee
Budget Committee
Staff Development Committee
SGC reviews recommendations
Dept. Chairs Council reviews recommendation
Academic Senate reviews recommendation
EPC reviews recommendation
Administrative requests reviewed & recommendations sent to SGC
Instruction-related requests reviewed & recommendations sent to Ed Planning Committee
Administration
Department Chairs Council/A.S./Faculty
Shared Governance Council (SGC)
InfoTech Committee receives request or proposal regarding computer-related issue
Screening Committee reviews proposal
Start of Process

Dotted box	possible action or source: outside scope of InfoTech Committee
Solid box	area directly related to InfoTech Committee or within scope of responsibility
Solid line	path of decision-making outside scope of InfoTech Committee
Bold box	action within scope of InfoTech Committee responsibility
Bold line	path of decision-making within scope of InfoTech Committee responsibility

A.11 LACC Computer and Public Network Use Policy

A. PURPOSE

Los Angeles City College owns and operates a variety of computing systems which are provided for the use of Los Angeles City College students, faculty and staff in support of the programs of the college and are to be used for education, research, academic development and public service only. Commercial uses are specifically excluded. All students, faculty and staff are responsible for seeing that these computing facilities are used in an effective, efficient, ethical and lawful manner. This document establishes rules and prohibitions that define acceptable use of these systems. Unacceptable use is prohibited, and is grounds for loss of computing privileges, as well as discipline or legal sanctions under Federal, State and local laws.

B. AUDIENCE AND AGREEMENT

All users of Los Angeles City College computing systems must read, understand and comply with the policies outlined in this document, as well as any additional guidelines established by the administrators of each system. Such guidelines will be reviewed by the Office of Academic Computing and may become subject to Board approval as a District policy or procedure. BY USING ANY OF THESE SYSTEMS, USERS AGREE THAT THEY WILL COMPLY WITH THESE POLICIES.

C. RIGHTS

These computer systems, facilities and accounts are owned and operated by Los Angeles City College. Los Angeles City College reserves all rights, including termination of service without notice, to the computing resources which it owns and operates. These procedures shall not be construed as a waiver of any rights of Los Angeles City College, nor shall they conflict with applicable acts of law. Users have rights that may be protected by Federal, State, and local laws.

D. PRIVILEGES

Access and privileges on Los Angeles City College computing systems are assigned and managed by the administrators of specific individual systems. Eligible individuals may become authorized users of a system and be granted appropriate access and privileges by following the approval steps prescribed for that system. All access to the College's computer resources, including the issuing of passwords, must be approved by a designee of the Office of Academic Computing. Users may not, under any circumstances, transfer or confer these privileges to other individuals. Any account assigned to an individual shall not be used by others without written permission from the systems administrator. The authorized user is responsible for the proper use of the system, including any password protection.

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E. RESPONSIBILITIES

Users are responsible for maintaining the following:

(a) An environment in which access to all College computing resources are shared equitably among users. The system administrator of each system sets minimum guidelines within which users must conduct their activities.

(b) An environment conducive to learning:
A user who uses the College's computing systems to harass or make defamatory remarks, shall bear full responsibility for his or her actions. Further, by using these systems, users agree that individuals who transmit such remarks shall bear sole responsibility for their actions. Users agree Los Angeles City College's role in managing these systems is only as an information carrier, and that they will never consider transmission through these systems as an endorsement of said transmission by Los Angeles City College. Many of the Los Angeles City College computing systems provide access to outside networks, both public and private, which furnish electronic mail, information services, bulletin boards, conferences, etc. Users are advised that they may encounter material which may be considered offensive or objectionable in nature or content. Users are further advised that Los Angeles City College does not assume responsibility for the contents of any of these outside networks. The user agrees to comply with the acceptable use guidelines for whichever outside networks or services they may access through Los Angeles City College systems. Further, the user agrees to follow proper etiquette on outside networks. Documents regarding etiquette are available through system administrators and through specific individual networks. The user agrees never to attempt to transmit, or cause to be transmitted, any message in which the origination is deliberately misleading (except for those outside services which may conceal identities as part of the service). The user agrees that, in the unlikely event that someone does transmit, or cause to be transmitted, a message that is inconsistent with an environment conducive to learning or with a misleading origination, the person who performed the transmission will be solely accountable for the message, not Los Angeles City College, which is acting solely as the information carrier.

(c) An environment free of illegal or malicious acts:
The user agrees never to use a system to perform an illegal or malicious act. Any attempt to increase the level of access to which (s)he is authorized, or any attempt to deprive other authorized users of resources or access to any Los Angeles City College computer system shall be regarded as malicious, and may be treated as an illegal act.

(d) A secure environment:
Any user who finds a possible security lapse on any system is obliged to report it to the system administrators. The system must not be used until the system administrator has investigated the problem.
Knowledge of passwords or of loopholes in computer security systems shall not be used to damage computing resources, obtain extra resources, take resources from another user, gain unauthorized access to resources or otherwise make use of computing resources for which

proper authorization has not been given. Users are responsible for backup of their own data.

F. ACCOUNTS

An account assigned to an individual must not be used by others without written permission from the system administrator. The individual is responsible for the proper use of the account, including proper password protection.

G. CONFIDENTIALITY

Programs and files are confidential unless they have been made available, with written permission, to other authorized individuals. The District reserves the right to access all information stored on District computers. File owners will be notified of file access and/or maintenance, in advance, if such notice is practical. When performing maintenance, every effort is made to insure the privacy of a user's files. However, if policy violations are discovered, they will be reported immediately to the appropriate systems administrator.

H. SYSTEM USAGE

Electronic communications facilities (such as e-mail) are for college related activities only. Fraudulent, harassing or obscene messages and/or materials are not to be sent or stored.

I. SYSTEM PERFORMANCE

No one should deliberately attempt to degrade the performance of a computer system or to deprive authorized personnel of resources or access to any college computer system.

J. UNAUTHORIZED ACCESS

Loopholes in computer security systems or knowledge of a special password should not be used to damage the computer system, obtain extra resources, take resources from another user, gain access to systems or use systems for which proper authorization has not been given.

K. COPYRIGHT

Computer software protected by copyright is not to be copied from, into, or by using campus computing facilities, except as permitted by law or by the contract with the owner of the copyright. This means that such computer and microcomputer software may only be copied in order to make back-up copies, if permitted by the copyright owner. The number of copies and distribution of copies may not be done in such a way that the number of simultaneous users in a department exceeds the number of original copies purchased by that department.

L. VIOLATIONS

An individual's computer use privileges may be suspended immediately upon the discovery of a possible violation of these policies. Such suspected violations will be confidentially reported to the appropriate system administrator.

Violations of these policies will be dealt with in the same manner as violation of other college policies and may result in disciplinary review. In such a review, the full range of disciplinary sanctions is available including the loss of computer use privileges, dismissal from the college and legal action Violations of some of the above policies may constitute a criminal offense

M. ADDITIONAL GUIDELINES

System administrators will establish more detailed guidelines, as needed, for specific computer systems and networks. These guidelines will cover such issues as allowable connect time and disk space, handling of unretrievable mail, responsibility for account approval and other items related to administering the system

N. LEGAL MANDATE

The following is a statement regarding this system that is mandated, or may soon be mandated, by Federal and State law. In some cases, local policy is also promulgated. This policy and procedure shall not be construed as a waiver of any rights of Los Angeles City College. The systems have the ability to read your mail: Your own account, and the system administrator account. While reasonable attempts have been made to ensure the privacy of your accounts and your electronic mail, this is no guarantee that your accounts or your electronic mail is private. The systems are not secure, nor are they connected to a secure network.

(lawpolcy doc 8-28-96)

A.13 Fair Use Guidelines for Educational Multimedia

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1. INTRODUCTION

1.1 Preamble

Fair use is a legal principle that provides certain limitations on the exclusive rights** of copyright holders. The purpose of these guidelines is to provide guidance on the application of fair use principles by educators, scholars and students who develop multimedia projects using portions of copyrighted works under fair use rather than by seeking authorization for non-commercial educational uses. These guidelines apply only to fair use in the context of copyright and to no other rights.

There is no simple test to determine what is fair use. Section 107 of the Copyright Act*** sets forth the four fair use factors which should be considered in each instance, based on particular facts of a given case, to determine whether a use is a "fair use": (1) the purpose and character of use, including whether such use is of a commercial nature or is for nonprofit educational purposes, (2) the nature of the copyrighted work, (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole, and (4) the effect of the use upon the potential market for or value of the copyrighted work.

While only the courts can authoritatively determine whether a particular use is fair use, these guidelines represent the participants'**** consensus of conditions under which fair use should generally apply and examples of when permission is required. Uses that exceed these guidelines may or may not be fair use. The participants also agree that the more one exceeds these guidelines, the greater the risk that fair use does not apply.

The limitations and conditions set forth in these guidelines do not apply to works in the public domain -- such as US Government works or works on which copyright has expired for which there are no copyright restrictions -- or to works for which the individual or institution has obtained permission for the particular use. Also, license agreements may govern the uses of some works and users should refer to the applicable license terms for guidance.

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*These Guidelines shall not be read to supersede other preexisting education fair use guidelines that deal with the Copyright Act

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The participants who developed these guidelines met for an extended period of time and the result represents their collective understanding in this complex area. Because digital technology is in a dynamic phase, there may come a time when it is necessary to review the guidelines. Nothing in these guidelines shall be construed to apply to the fair use privilege in any context outside of educational and scholarly uses of educational multimedia projects.

This Preamble is an integral part of these guidelines and should beincluded whenever the guidelines are reprinted or adopted by organizations and educational institutions. Users are encouraged to reproduce and distribute these guidelines freely without permission; no copyright protection of these guidelines is claimed by any person or entity.

1.2 Background

These guidelines clarify the application of fair use of copyrighted works as teaching methods are adapted to new learning environments.Educators have traditionally brought copyrighted books, videos, slides, sound recordings and other media into the classroom, along with accompanying projection and playback equipment. Multimedia creators integrated these individual instructional resources with their own original works in a meaningful way, providing compact educational tools that allow great flexibility in teaching and learning. Material is stored so that it may be retrieved in a nonlinear fashion, depending on the needs or interests of learners. Educators can use multimedia projects to respond spontaneously to students' questions by referring quickly to relevant portions. In addition, students can use multimedia projects to pursue independent study according to their needs or at a pace appropriate to their capabilities. Educators and students want guidance about the application of fair use principles when creating their own multimedia projects to meet specific instructional objectives.

1.3 Applicability of These Guidelines

(Certain basic terms used throughout these guidelines are identifiedin bold and defined in this section.)

These guidelines apply to the use, without permission, of portions of lawfully acquired copyrighted works in educational multimedia projectswhich are created by educators or students as part of a systematic learning activity by nonprofit educational institutions. Educational multimedia projects created under these guidelines incorporate students' or educators' original material, such as course notes or commentary, together with various copyrighted media formats including but not limited to, motion media, music, text material, graphics, illustrations, photographs and digital software which are combined into an integrated presentation. Educational institutions are defined as nonprofit organizations whose primary focus is supporting research and instructional activities of educators and students for noncommercial purposes.

For the purposes of these guidelines, educators include faculty, teachers, instructors and others who engage in scholarly research and instructional activities for educational institutions. The copyrighted works used under these guidelines are lawfully acquired if obtained by the institution or individual through lawful means such as purchase, gift or license agreement but not pirated copies. Educational multimedia projects which incorporate portions of copyrighted works under these guidelines may be used only for educational purposes in systematic learning activities including use in connection with non-commercial curriculum-based learning and teaching activities by educators to students enrolled in courses at nonprofit educational institutions or otherwise permitted under Section 3. While these guidelines refer to the creation and use of educational multimedia projects, readers are advised that in some instances other fairuse guidelines such as those for off-air taping may be relevant.

2. PREPARATION OF EDUCATIONAL MULTIMEDIA PROJECTS USING PORTIONS OF COPYRIGHTED WORKS

These uses are subject to the Portion Limitations listed in Section 4. They should include proper attribution and citation as defined in Sections6.2.

2.1 By Students:

Students may incorporate portions of lawfully acquired copyrighted works when producing their own educational multimedia projects for a specific course.

2.2 By Educators for Curriculum-Based Instruction:

Educators may incorporate portions of lawfully acquired copyrighted works when producing their own educational multimedia projects for their own teaching tools in support of curriculum-based instructional activities at educational institutions.

3. PERMITTED USES OF EDUCATIONAL MULTIMEDIA PROJECTS CREATED UNDER THESE GUIDELINES

Uses of educational multimedia projects created under these guidelinesare subject to the Time, Portion, Copying and Distribution Limitations listed in Section 4.

3.1 Student Use:

Students may perform and display their own educational multimedia projects created under Section 2 of these guidelines for educational uses in the course for which they were created and may use them in their own portfolios as examples of their academic work for later personal uses such as job and graduate school interviews.

3.2 Educator Use for Curriculum-Based Instruction:

Educators may perform and display their own educational multimedia projects created under Section 2 for curriculum-based instruction to students in the following situations:

3.2.1 for face-to-face instruction,

3.2.2 assigned to students for directed self-study,

3.2.3 for remote instruction to students enrolled in curriculum-based courses and located at remote sites, provided over the educational institution's secure electronic network in real-time, or for after class review or directed self-study, provided there are technological limitations on access to the network and educational multimedia project (such as a password or PIN) and provided further that the technology prevents the making of copies of copyrighted material.

If the educational institution's network or technology used to access the educational multimedia project created under Section 2 of these guidelines cannot prevent duplication of copyrighted material, students or educators may use the multimedia educational projects over an otherwise secure network for a period of only 15 days after its initial real-time remote use in the course of instruction or 15 days after its assignment for directed self-study. After that period, one of the two use copies of the educational multimedia project may be placed on reserve in a learning resource center, library or similar facility for on-site use by students enrolled in the course. Students shall be advised that they are not permitted to make their own copies of the educational multimedia project.

3.3 Educator Use for Peer Conferences:

Educators may perform or display their own educational multimedia projects created under Section 2 of these guidelines in presentations to their peers, for example, at workshops and conferences.

3.4 Educator Use for Professional Portfolio

Educators may retain educational multimedia projects created under Section 2 of these guidelines in their personal portfolios for later personal uses such as tenure review or job interviews.

4. LIMITATIONS - TIME, PORTION, COPYING AND DISTRIBUTION

The preparation of educational multimedia projects incorporating copyrighted works under Section 2, and the use of such projects under Section 3, are subject to the limitations noted below.

4.1 Time Limitations

Educators may use their educational multimedia projects created for educational purposes under Section 2 of these guidelines for teaching courses, for a period of up to two years after the first instructional use with a class. Use beyond that time period, even for educational purposes, requires permission for each copyrighted portion incorporated in the production. Students may use their educational multimedia projects as noted in Section 3.1.

4.2 Portion Limitations

Portion limitations mean the amount of a copyrighted work that can reasonably be used in educational multimedia projects under these guidelines regardless of the original medium from which the copyrightedworks are taken. In the aggregate means the total amount of copyrighted material from a single copyrighted work that is permitted to be used in an educational multimedia project without permission under these guidelines. These limitations apply cumulatively to each educator's or student's multimedia project(s) for the same academic semester, cycle or term. All students should be instructed about the reasons for copyright protection and the need to follow these guidelines. It is understood, however, that students in kindergarten through grade six may not be able to adhere rigidly to the portion limitations in this section in their independent development of educational multimedia projects. In any event, each such project retained under Sections 3.1 and 4.3 should comply with the portion limitations in this section.

4.2.1 Motion Media

Up to 10% or 3 minutes, whichever is less, in the aggregate of a copyrighted motion media work may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2 of these guidelines.

4.2.2 Text Material

Up to 10% or 1000 words, whichever is less, in the aggregate of a copyrighted work consisting of text material may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2 of these guidelines. An entire poem of less than 250 words may be used, but no more than three poems by one poet, or five poems by different poets from any anthology may be used. For poems of greater length, 250 words may be used but no more than three excerpts by a poet, or five excerpts by different poets from a single anthology may be used.

4.2.3 Music, Lyrics, and Music Video

Up to 10%, but in no event more than 30 seconds, of the music and lyrics from an individual musical work (or in the aggregate of extracts from an individual work), whether the musical work is embodied in copies or audio or audiovisual works, may be reproduced or otherwise incorporated as a part of a multimedia project created under Section 2. Any alterations to a musical work shall not change the basic melody or the fundamental character of the work.

4.2.4 Illustrations and Photographs

The reproduction or incorporation of photographs and illustrations is more difficult to define with regard to fair use because fair use usually precludes the use of an entire work. Under these guidelines a photograph or illustration may be used in its entirety but no more than 5 images by an artist or photographer may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2. When using photographs and illustrations from a published collective work, not more than 10% or 15 images, whichever is less, may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2.

4.2.5 Numerical Data Sets

Up to 10% or 2500 fields or cell entries, whichever is less, from a copyrighted database or data table may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2 of these guidelines. A field entry is defined as a specific item of information, such as a name or Social Security number, in a record of a database file. A cell entry is defined as the intersection where a row and a column meet on a spreadsheet.

4.3 Copying and Distribution Limitations

Only a limited number of copies, including the original, may be made of an educator's educational multimedia project. For all of the uses permitted by Section 3, there may be no more that two use copies only oneof which may be placed on reserve as described in Section 3.2.3.

An additional copy may be made for preservation purposes but may only be used or copied to replace a use copy that has been lost, stolen, or damaged. In the case of a jointly created educational multimedia project,each principal creator may retain one copy but only for the purposes described in Sections 3.3 and 3.4 for educators and in Section 3.1 forstudents.

5. EXAMPLES OF WHEN PERMISSION IS REQUIRED

5.1 Using Multimedia Projects for Non-Educational or Commercial Purposes

Educators and students must seek individual permissions (licenses)before using copyrighted works in educational multimedia projects for commercial reproduction and distribution.

5.2 Duplication of Multimedia Projects Beyond Limitations Listed in These Guidelines

Even for educational uses, educators and students must seek individual permissions for all copyrighted works incorporated in their personally created educational multimedia projects before replicating or distributing beyond the limitations listed in Section 4.3.

5.3 Distribution of Multimedia Projects Beyond Limitations Listed in These Guidelines

Educators and students may not use their personally created educational multimedia projects over electronic networks, except for uses as described in Section 3.2.3, without obtaining permissions for all copyrighted works incorporated in the program.

6. IMPORTANT REMINDERS

6.1 Caution in Downloading Material from the Internet

Educators and students are advised to exercise caution in using digital material downloaded from the Internet in producing their own educational multimedia projects, because there is a mix of works protectedby copyright and works in the public domain on the network. Access to works on the Internet does not automatically mean that these can be reproduced and reused without permission or royalty payment and, furthermore, some copyrighted works may have been posted to the Internet without authorization of the copyright holder.

6.2 Attribution and Acknowledgement

Educators and students are reminded to credit the sources and display the copyright notice and copyright ownership information if this is shown in the original source, for all works incorporated as part of educational multimedia projects prepared by educators and students, including those prepared under fair use. Crediting the source must adequately identify the source of the work, giving a full bibliographic description where available (including author, title, publisher, and place and date of publication). The copyright ownership information includes the copyright notice (C, year of first publication and name of the copyright holder).

The credit and copyright notice information may be combined and shown in a separate section of the educational multimedia project (e.g. credit section) except for images incorporated into the project for the uses described in Section 3.2.3. In such cases, the copyright notice and the name of the creator of the image must be incorporated into the image when, and to the extent, such information is reasonably available; credit and copyright notice information is considered "incorporated" if it is attached to the image file and appears on the screen when the image is viewed. In those cases when displaying source credits and copyright ownership information on the screen with the image would be mutually exclusive with an instructional objective (e.g. during examinations in which the source credits and/or copyright information would be relevant to the examination questions),those images may be displayed without such information being simultaneously displayed on the screen. In such cases, this information should be linkedto the image in a manner compatible with such instructional objectives.

6.3 Notice of Use Restrictions

Educators and students are advised that they must include on the opening screen of their multimedia project and any accompanying print material a notice that certain materials are included under the fair use exemption of the U.S. Copyright Law and have been prepared according to the educational multimedia fair use guidelines and are restricted from further use.

6.4 Future Uses Beyond Fair Use

Educators and students are advised to note that if there is a possibility that their own educational multimedia project incorporating copyrighted works under fair use could later result in broader dissemination, whether or not as commercial product, it is strongly recommended that they take steps to obtain permissions during the development process for all copyrighted portions rather than waiting until after completion of the project.

6.5 Integrity of Copyrighted Works: Alterations

Educators and students may make alterations in the portions of the copyrighted works they incorporate as part of an educational multimedia project only if the alterations support specific instructional objectives. Educators and students are advised to note that alterations have been made.

6.6 Reproduction or Decompilation of Copyrighted Computer Programs

Educators and students should be aware that reproduction or decompilation of copyrighted computer programs and portions thereof, for example the transfer of underlying code or control mechanisms, even for educational uses, are outside the scope of these guidelines.

6.7 Licenses and Contracts

Educators and students should determine whether specific copyrighted works, or other data or information are subject to a license or contract.Fair use and these guidelines shall not preempt or supersede licenses and contractual obligations

APPENDIX A: (Endorsements and letters of support received as of September 23, 1996)

1. ORGANIZATIONS ENDORSING THESE GUIDELINES:
Agency for Instructional Technology (AIT)
American Association of Community Colleges (AACC)
American Society of Journalists and Authors (ASJA)
American Society of Media Photographers, Inc. (ASMP)
American Society of Composers, Authors and Publishers (ASCAP)
Association for Educational Communications and Technology (AECT)
Association for Information Media and Equipment (AIME)
Association of American Publishers (AAP)
Association of American Colleges and Universities (AAC&U)
Association of American University Presses, Inc. (AAUP)
Broadcast Music, Inc. (BMI)
Consortium of College and University Media Centers (CCUMC)
Creative Incentive Coalition (CIC)
Instructional Telecommunications Council (ITC)
Maricopa Community Colleges/Phoenix
Motion Picture Association of America (MPAA)
Music Publishers' Association of the United States (MPA)
Recording Industry Association of America (RIAA)
Software Publishers Association (SPA)

2. INDIVIDUAL COMPANIES AND INSTITUTIONS ENDORSING THESE GUIDELINES:
Houghton Mifflin
McGraw-Hill
John Wiley & Sons, Inc.
Time Warner, Inc.

3. U.S. GOVERNMENTAL AGENCIES SUPPORTING THESE GUIDELINES:
U.S. National Endowment for the Arts (NEA)
U.S. Copyright Office

APPENDIX B: ORGANIZATIONS PARTICIPATING IN GUIDELINE DEVELOPMENT:

Being a participant does not necessarily mean the organization has or will endorse these guidelines.
Agency for Instructional Technology (AIT)
American Association of Community Colleges (AACC)

American Association for Higher Education (AAHE)
American Library Association (ALA)
American Society of Journalists and Authors (ASJA)
American Society of Media Photographers (ASMP)
Artists Rights Foundation
Association of American Colleges and Universities (AAC&U)
Association of American Publishers (AAP)
-Harvard University Press
-Houghton Mifflin
-McGraw-Hill
-Simon and Schuster
-Worth Publishers
Association of College and Research Libraries (ACRL)
Association for Educational Communications and Technology (AECT)
Association for Information Media and Equipment (AIME)
Association of Research Libraries (ARL)
Authors Guild, Inc.
Broadcast Music, Inc. (BMI)
Consortium of College and University Media Centers (CCUMC)
Copyright Clearance Center (CCC)
Creative Incentive Coalition (CIC)
Directors Guild of America (DGA)
European American Music Distributors Corp.
Educational institutions participating in guideline discussion
-American University
-Carnegie Mellon University
-City College/City University of New York
-Kent State University
-Maricopa Community Colleges/Phoenix
-The Pennsylvania State University
-University of Delaware
Information Industry Association (IIA)
Instructional Telecommunications Council (ITC)
International Association of Scientific, Technical and Medical Publishers
Motion Picture Association of America (MPAA)
Music Publishers Association (MPA)
National Association of State Universities and Land-Grant Colleges(NASULGC)
National Council of Teachers of Mathematics (NCTM)
National Educational Association (NEA)
National Music Publishers Association (NMPA)
National School Boards Association (NSBA)
National Science Teachers Association (NSTA)
National Video Resources (NVR)
Public Broadcasting System (PBS)
Recording Industry Association of America (RIAA)
Software Publishers Association (SPA)
Time Warner, Inc.
U.S. Copyright Office
U.S. National Endowment for the Arts (NEA)
Viacom, Inc.

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C. CCC Telecommunications Plan

C.1 LACC 1996-97 Plan Telecommunications Expenditure Plan

Los Angeles City College
November 8, 1996

A. EXPENDITURE AREAS

"There are seven areas. Districts must first meet the three minimum expenditure areas listed below. If districts have met the minimum expenditure areas, they may expend funds in any of the seven areas."

1. "*Acquisition and installation of equipment, lease of communications lines, software and other associated costs with connecting to the California State University telecommunications wide area network (CSU-Net):*"

Los Angeles City College presently has a 56kbps connection to CSUNet. The college intends to use the $22,000 Plan A allotment to upgrade hardware, software and communications line to support a T1 connection to CSUNet.

2. "*Acquisition of video conferencing equipment.*"

Los Angeles City College does not currently have any video conferencing equipment. The $25,000 Plan B allotment will be used to purchase video conferencing hardware and software under the planned State contract. Equipment will include a 30 frame per second Codec, interface for three ISDN lines (384 kbps communications rate), 27" color monitor, microphones, and appropriate software.

3. "*Acquisition of analog and digital satellite downlink equipment.*"

Los Angeles City College currently has satellite downlink equipment with analog capabilities. Therefore, the $7,500 Plan C allotment will be used to upgrade the satellite downlink equipment and provide digital capabilities as well. Equipment will include one digital television receiver/decoder and one digital KU-Band converter.

B. RELATIONSHIP TO OTHER AREAS OF TECHNOLOGY AND TELECOMMUNICATIONS EXPENDITURES

"A district's expenditure plan should clearly identify the use of these moneys in relationship to the district's other technology and telecommunications expenditures. This should include funds received from block grants, general funds and/or special funds received from state, federal, or private grants."

A college-wide committee, authorized to make recommendations, is seriously evaluating the following major projects to be funded from the $850,000 block grant for State instructional equipment.

1. **Install fiber optic cabling to network the entire college for academic purposes only.**
2. **Upgrade the All-College Computer Lab by replacing 40 obsolete computers with state of the art computers.**
3. **Replace and expand equipment in the Instructional Multi-Media Center.**
4. **Provide additional equipment for the Library Automation Project.**

C. ANALYSIS OF THE CONFORMANCE OF THE PLAN TO THE APPLICABLE STANDARDS AND GUIDELINES

"The expenditure plan should state how the funds meet the minimum standards and guidelines specified in the attached appendices for CSUNet connections, video conferencing, satellite downlinks, and library automation as applicable."

In regard to the CSUNet connection, Los Angeles City College will upgrade its 56kbps connection to T1. Thus, all Plan A funds will be spent to accomplish that objective.

In regard to video conferencing and satellite communications, equipment will be purchased under the State contract and thus by definition will meet applicable standards.

D. HOW EACH EXPENDITURE AREA IN THE PLAN WILL ASSIST IN MEETING THE GOALS OF IMPROVED LEARNING, STUDENT SERVICES, AND ADMINISTRATIVE SERVICES

"The district's expenditure plan should state how the district's use of video conferencing technology, satellite technology and library automation will improve student learning, student services delivery and administrative services."

The Plan A funds will improve the accessibility and effectiveness of the college's network, that currently provides access for all students and faculty to the internet, resources that are being used in support of instructional programs.

The Plan B funds will allow the college to communicate with other District colleges and beyond in transmitting and receiving curriculum that would otherwise not be accessible (e.g., highly specialized courses, very low enrollment courses), and in recruiting new populations of students.

The Plan C funds will allow the college to improve and extend its participation to conferences, a resource that will enrich the instructional program and provide increased staff development opportunities (i.e., conventions, town hall meetings).

APPENDIX E

California Community College Telecommunications and Technology Physical Inventory/CSU Required Information

The CSU requires certain information from each of the participating community colleges in the Community Colleges Telecommunications Technology Infrastructure Program in order to better design the system architecture. Certain information is already contained in the CCC Telecommunications and Technology Physical Inventory . Other information may need to be gathered as well. The CSU Requested Questions below are not contained in the current CCC Telecommunications and Technology Physical Inventory. The second set of questions below contains items from the current CCC Telecommunications and Technology Physical Inventory that provide other CSU required information. They are listed here for reference purposes. The sections and numbers are taken directly from the Survey. At the time of installation, additional campus information may be necessary and will be gathered as a part of the agreement process with each campus.

Administration and Demographics

1. Site Information.

Name: LOS ANGELES CITY COLLEGE CCC Code: 48

Street Address: 855 N. VERMONT AVE.

City Address: LOS ANGELES

Zip Code: 90029

Phone Number: (213) 953-4000

2. Structure.

Number of Students? ___< 6,000 ___6,000-11,999 X 12,000-18,000 ___> 18,000

Number of instructors/faculty (including Adjunct)? ___< 200 ___200-399 X 400-599 ___> 600

Number of Administrative & support staff? ___< 50 ___50-99 ___100-200 X >200

Do you have regularly participating members in:

campus activities from: ___No _X_Yes. If Yes. please describe:

a. The general community? ADVISORY COMMITTEE FOR VOCATIONAL PROGRAMS

b. Private industry? ADVISORY COMMITTEE FOR VOCATIONAL PROGRAMS

c. Private businesses? ADVISORY COMMITTEE FOR VOCATIONAL PROGRAMS

d. Other? N/A

3. Plant Infrastructure

Plant Cable Service - MPOE

Identify the location of the MPOE (minimum point of entry) for the local service rovider. ADMINISTRATION BUILDING (BASEMENT)

Plant Cable Service - MPOE to LAN Hub

What is the distance from the MPOE to the campus LAN hub? 100 FT. APPROX.

What type of cable is available from the MPOE to the LAN hub?__________

Is conduit available from the MPOE to the campus LAN hub? _X_Yes ___No

Data.

1. What is your primary Mainframe/Large-scale platform and type:

Type Quantity

a. Amdahl __________

b. Bull __________

c. Digital __________

d. Hewlett Packard __________

e. Sequent __________

f. IBM __________

g. Tandem __________

h. Unisys __________

i. Other? Please name __________

2. What is/are your primary Micro/Mini Computing platform(s) and type(s):

Type Quantity

a. Data General __________

b. Digital __________

c. Hewlett Packard __________

d. IBM RS/6000 __________

e. IBM AS/400 __________

f. Sequent __________

g. Silicon Graphics __________

h. Sun Microsystems __________

i. Other? Please name __________

3. What is/are your primary PC/Workstation computing platform(s) and type(s):

Type Quantity

a. Apple __________

b. AST __________

c. Compaq X

d. Dell ____________

e. Digital ____________

f. Gateway 2000 ____________

g. HP PC's ____________

h. HP Apollo ____________

i. IBM PC's X

j. IBM RS/6000 ____________

k. Intel ____________

l. Sun Microsystems ____________

m. Other? Please name VARIOUS CLONES PENTIUM, 486, 386

Network Architecture

1. Which Dedicated services and rates are installed and utilized at your campus?

	Data Rates:		Data Rates:
Analog		T1	
DDS		T3	
ADN		Satellite	
FT1	384KBPS	Other	FRAME RELAY

2. Which Switched services and rates are installed and utilized at your campus?

---------------------Data Rates--------------------

Dial-up

Switched Digital ____________________

ISDN ______________________________

Frame Relay ______________________________

SMDS ______________________________

ATM ______________________________

Satellite ______________________________

Other ______________________________

3. LAN/WAN environments.

Do you currently operate a LAN environment? ___ Yes ___ No

What type of topologies do you use (check all that apply)?

Token Ring X

Ethernet X

Fast Ethernet X

Local Talk/AppleTalk ____

10BaseT X

FDDI ____

CDDI ____

ATM ____

4. What Network Protocols do you use (check all that apply)?

TCP/IP X

SPX/IPX X

DECnet ____

APPC/LU6.2 ____

NetBIOS ____

NetBEUI ____

SNA ____

OSI/GOSIP ____

NFS ____

Other____________________

5. Do you have a current Internet service provider? X__Yes __No

If yes, who is that provider?

CSUnet	X		
County Office of Education	______		
Local Commercial Provider	______	Provider Name	____________________
Other	______	Provider Name	____________________

Software.

1. Operating Systems. OS#1/ OS#2/ OS#3

What are you Operating Systems for:

a. Mainframe/Large Systems? ____________________

b. Micro/Mini Systems? ____________________

c. Workstations ____________________

d. PC's OS2 DOS 6.22, WINDOWS 95

e. MAC's ____________________

f. Other ____________________

2. Network Operating Systems

Please name your Network Operating Systems.

a. Netware 3.x x

b. Netware 4.x x

c. NT Advanced Server ___

d. Banyan VINES ___

e. DEC Pathworks ___

f. Workgroup for Windows ___

g. Other ___ Please name: ___

3. Remote Dial-up Access: please identify the types of communications packages used.

PC to Host ___

PC to PC COSESSION 6.1e

PC to Server ___

Other ___

D. Forms

D.1 InfoTech Instructional Computing Survey No. 1—Status of Computers

In order to develop, document, plan, recycle, and maintain information technology in our educational program, we need your help. Please answer the questionnaire to the best of your knowledge.

Department Name ____

Wintel Machines

Manufacturer's Name	8086/8088	80286	80386	80486	Pentium	Number

Macintosh Machines

Model Name—Classic, LCIII, PowerMac, etc.	Model No.	60020	60030	60040	PowerPC	Number

How are the computers used?

Instructional	Category	Location	Number
	Lab		
	Classroom		
	Office		
Administration			

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Peripherals:

Printers	Manufacturer	Model No.	DPI	BW/Color	Number
Dot-Matrix					
Ink-Jet					
Bubble-Jet					
Laser					
Other					

Device	Manufacturer	Model No.	BW/Color	Number
Scanner				
Fax/Modem				

Software:

Application	Brand	Version	Manufacturer	Site License	Stations
WordProcessing					
SpreadSheets					
Database					
OCR					
CAD					
Other					

Operating Systems	Version	No. of Stations
DOS		
OS/2		
Unix		
Macintosh		

D.2 Instructional Computing Survey No. 2—Use of Computers

To assess future instructional computing needs at LACC, we wish to know how you use computers NOW to assist in your teaching duties and student activities, and what activities you envision in your future. **Please respond even if you do not use computers.** Thank you for your cooperation.

DEPARTMENT ____________________ NAME ____________________

I ____________ do ____________ do not use computers in my instructional activities.

I am primarily ____________ a MAC ____________ a PC user.

If you do use computers currently for instructional activities, please check both areas below.

In class preparation and recordkeeping activities, I currently use a computer for: [Check all that apply.]

____________ word processing
____________ grade recordkeeping (e.g. in a spreadsheet)
____________ database of student information or reference material
____________ graphics and multimedia (e.g. draw or paint programs to prepare visual aids)
____________ E-mail with colleagues and/or students
____________ access to the Internet for information
____________ personal scheduling, time and contact management
____________ use of specialized software in my discipline
____________ other ______________________________

If resources/cost/availability of expertise were no object, what would you like to be able to do on a computer to assist you in your instructional duties?

My students currently use computers as part of my course curriculum for: [Check all that apply.]

____________ word processing to complete the assignments
____________ viewing CD-ROM multimedia presentations
____________ E-mail to me or each other
____________ access to the Internet to do research for my courses
____________ computer-aided instruction (CAI) for drill and practice
____________ individualized skill-building
____________ computer modeling or simulation
of what? ________________________
____________ CADD (design and drawing)
____________ graphing and data analysis
____________ educational games or role playing
____________ preparation of multimedia presentations
____________ other ________________________

What would you like to do with your students in the classroom or as part of their instructional program that you cannot do now?

What resources do you need to implement your ideal program?

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D.3 Request for Recycled Computers

Please complete this form and submit it to Administration 208 (Office of Academic Affairs) no later than ____________________. Retain a copy for your records. Consolidate requests from the same area, and have your supervisor or department chair sign the form.

______________________________ ______________

Initiator (Please print name clearly.) Extension #

Request made for: **Department** **Faculty Member** **Staff**

(Circle one only. Make a ***separate*** request for each category.)

Computers Requested (Refer to inventory list.)

TYPE	**QUANTITY**

Use to which computer(s) will be put.

(Please explain briefly how this request will benefit your department, individual office, and/or students. Attach additional pages as necessary.)

Additional information

(Please include other items that would be helpful in making decisions about where to place the equipment. Attach additional pages as necessary.)

____

Department Chair/Supervisor Signature

Office Use Only

Recommendation: Approved as Requested Modified Approval Rejected

Date: __________ Signed: ______________________

9/95

D.4 Sample—Direct Offer for Technical Support from Manufacturer

No-Charge Electronic Information

- **Internet Services:** Access the Microsoft Frequently Asked Questions (FAQ), Software Library, Knowledge Base, and other technical information on http://www.microsoft.com/ or ftp://ftp.microsoft.com/.
- **Microsoft FastTips:** Automated answers to your common technical questions by calling (800) 936-4200.

Fee-Based Support

Fee-based technical support on a per-incident basis is available specifically for educational institutions from the following sources:

Keane, Inc.:	(800) 44-WIN95
Stream International, Inc.:	(800) 807-0383

If you expect to need telephone technical support, we recommend that you call these sources today to ensure service when your product arrives.

3 Please read and sign below:

I understand that this Windows 95 Special Promotional Offer provides only the support outlined above. I further understand that copies of Windows 95 made available through this offer are for US educational institution use only and are not for resale.

I have read and agree to all the conditions above:

Signature ____________________

Please print name here ____________________

Title ____________________

4 Send your completed order form to:

Windows 95 Special Promotional Offer for Education
PO Box 810
Buffalo, NY 14207-0810

When you mail your order form, please remember to:

- **Order at least five copies**
- **Enclose your educational institutional check or purchase order**
- **Enclose your order form**
- **If applicable, enclose a copy of your Tax Exemption Certificate**
- **Sign the order form**

Please allow 2-4 weeks for delivery upon receipt of order form. This offer valid in the 50 United States only and is not valid with any other offer. This offer is only good while supplies last or until October 31, 1996. If you're not completely satisfied, return your copies of Windows 95 within 30 days of purchase for a complete refund.

Not for Resale

For more information please call (800) 633-2114 or visit our Web site at http://www.microsoft.com/k-12/win95/.
People who are hearing impaired can reach Microsoft text telephone (TT/TDD) services at (800) 892-5234.

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ORDER NOW AND YOU'LL GET A FREE COPY OF THE IN AND OUT OF THE CLASSROOM WITH WINDOWS 95 TRAINING GUIDE!

1 Please provide your name and shipping address:

Name: ____________________

Title: ____________________

School / Organization: ____________________

Address: ____________________

Address: ____________________

City: ____________________

State: __________ Zip: __________

Daytime telephone (in case there are questions about your order):

(____)____________________

30-day money-back guarantee

2 Order Information: (See next page for Technical Support and required signature information.)

Personal checks and credit cards will not be accepted. Order form must accompany your check or purchase order. Sorry, we can't accept phone orders. Orders for fewer than 5 copies will not be processed.

Select from the options below based on:

1. Your present operating system
2. The desired format for your upgrade

	Quantity		Price		Total	
PCs currently running only DOS: need Windows 95 on 3.5" disks	______					(383-00191)
PCs currently running Windows: need Windows 95 on 3.5" disks	______					(383-00192)
PCs currently running Windows: need Windows 95 on CD-ROM	______					(383-00193)
Total number of copies ordered (*MINIMUM ORDER: 5 COPIES)	______	x	$ 19.95	=	$______	PURCHASE PRICE
Shipping charges ($3.00 per unit)	______	x	$ 3.00	=	$______	SHIPPING AND HANDLING
Applicable sales tax**				=	$______	TAX**
			Total	=	$______	

I am enclosing a: ☐ purchase order ☐ institutional check

**Sales tax. If applicable, add the appropriate sales tax in the following states: AR,AZ,CA,CO,CT,DC,FL,GA,HI,IA,IL,IN,KS,KY,LA,MA,MD,ME,MI,MN,MO,MS,NC,ND,NE,NJ (NJ residents pay tax on cost only), NM,NV,NY,OH,OK,PA,RI,SC,SD,TN,TX,UT,VA,VT,WA,WI,WV,WY. Microsoft reserves the right to correct tax rates and/or collect the sales tax assessed by additional states as required by law, without notice. If you qualify for tax exempt status, please enclose a copy of your Tax Exemption Certificate.

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D.5 Shared InfoTech Resources Agreement

This agreement is made between ________________ **(requesting department)** and

__________________ **(providing department)** and is based upon the following detailed

arrangements between the parties.

Requester's Description

Objective

Obstacles

Needs

Provider's Situation

Objectives

Resources

Limitations

The Agreement (Specify all applicable information.)

Equipment and Maintenance

Schedule, duration of sharing

Staffing requirements

Responsibility for damage, liability, and method of repair

Costs, compensations

Other notable circumstances

Both parties acknowledge that any disagreement regarding the terms or meaning of this agreement shall be taken to the Information Technology Committee for further discussion. Modifications to this Agreement can be made by mutual consent at any time. Requester and Provider acknowledge that they have given full thought to the making of the agreement and are fully aware of its contents.

______________________________	______________________________
Dept. Chair Requester	**Dept. Chair Provider**
______________________________	______________________________
InfoTech Chair	**SGC Chair**
________________	____________________
Agreement Date	**Expiration Date**

D.6 Proposal Tracking Form

DEPARTMENT_____________ DATE SUBMITTED___________

INITIATOR________________ EXTENSION ________________

TITLE OF PROPOSAL____
(short description)____
____
____

DATE SENT TO SCREENING COMMITTEE________________________

SCREENING COMPLETE DATE_________________________________

INITIAL SCREENING RECOMMENDATION

_______ Advanced to next level review, consider for funding

______ Returned to department with explanation

______ Proposal needs clarification, more input or discussions with the review committee and/or initiator(s)

FINAL RECOMMENDATION

______ Fund in full in the amount of: ____________________

______ Partial Funding in the amount of: _________________

______ Meritorious proposal but not funded

______ Proposal retained for possible future funding

______ Consider revision and resubmission

D.7 Reviewers' Instructions

1.) Scoring: subjective
  - use a relative score 0-10 for an overall merit rating
  - all ranking of seven or higher by at least four of the six members of reviewers team
  - will be advanced to the next level of consideration

2.) All reviewers fill out proposal screening form and attach it to the copy of the proposal when returning it after the review

3.) Example summaries for meritorious or constraining facts (examples shown below)

4.) a. - Possible other source that this proposal would be eligible for.
  VocEd Funds (VATEA)
  Foundations
  Charitable organizations
  Upward Bound
  FII grants
  District grant writing center/Team/Foundation

b. - If you think the proposal could qualify for one of these please indicate in your summary

D.8 Initial Screening Form

DEPARTMENT ________________ DATE SUBMITTED ______________

INITIATOR ____________________ PHONE/EXTENSION ______________

REVIEWER____________________ OVERALL MERIT________________
(0 -- 10)

1. Are there any constraints or restrictions placed on the use of the available funds? No_____ Yes_____
Constraints/Restrictions____
____
____

2. Are there other sources of funding that are also applicable to this proposal?
Other Sources____
____

3. Could the costs of the project be reduced through lease or lease/purchase agreements?
No_____ Yes_____

4. To what extent does this proposal meet the mission and educational goals of the College? Please Explain _______________________________
____
____

5. Is this project essential for the continuation/accreditation of a program or for its continued relevancy in modern educational and work environments?
No_____ Yes_____
If Yes, Why____
____
____

6. Is this proposal complete and self-contained, or is it a partial proposal that will require later additions to become fully functional?
Complete/Self-Contained_____ Partial_____

7. How will this project affect the infrastructure (power, AC, phone lines, furniture, network and cabling connections) of the institution? ______________

8. Can the facilities/equipment/technology in this proposed project be shared by several departments or better provided in an all-college facility?
Yes, shared by several departments. Why?______________

Yes, provided in all-college facility. Why?______________

9. What is the number of students served by the proposal? What will be the impact on WSCH? ______________

10. Does this proposal replace existing equipment that can be recycled for another use? No_____ Yes_____

Summarize Meritorious and/or Constraint Factors: example for reviewer______________

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